THE

PERIPLUS

OF THE

ERYTHREAN SEA.

PART THE FIRST.



Turner sculp.

Jemmy at Gower.

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PART THE FIRST.

CONTAINING,

AN ACCOUNT OF

THE NAVIGATION OF THE ANCIENTS,

FROM THE SEA OF SUEZ TO THE COAST OF ZANGUEBAR.

WITH DISSERTATIONS.

By WILLIAM VINCENT, D.D.

Γεωγραφικὰ quæ inſtitueram magnum opus eſt, et hercule res ſunt difficiles ad explicandum et ὁμοιοδεῖς, nec tam poſſunt ἀνθηρογραφεῖσθαι quàm videbatur.

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TO

THE KING.

SIR,

WHILE we contemplate the maritime power of Great Britain, raiſed under the auſpices of Your Majeſty to a pre-eminence unexampled in the annals of mankind; we view with equal pleaſure thoſe not leſs uſeful though leſs ſplendid efforts, which, under Your Majeſty's immediate patronage and direction, have advanced the limits of diſcovery to that

boundary which Nature has fixed as a barrier to the enterprize of man.

It is due to the consummate abilities of the most experienced commanders, exercised under this patronage and direction, that a solution has been given to three of the greatest problems that concern the world which we inhabit; for it is now determined by a succession of voyages commenced and prosecuted by Your Majesty's command, that the Entrance into the Pacifick Ocean by a passage either on the North West or North East is impracticable, and that the Existence of a great Southern Continent had nothing but theory for its support. It has likewise been ascertained that the longest voyages are not detrimental to life

life or health; and it has been proved by the execution of Your Majeſty's commands, that diſtant nations may be viſited, not for the purpoſe of ſubjugation, but for the interchange of mutual benefits, and for promoting the general intercourſe of mankind.

In the proſecution of theſe great deſigns, if we have ſeen ſcience advancing to perfection, it is ſtill an object of intereſting curioſity to turn our view back from the reſult to the origin, to trace navigation to its ſource, and diſcovery to its commencement.

This is the deſign of the Work which I have now the honour to preſent to Your

Majeſty for protection; its merits muſt be left to future deciſion; but it is at leaſt a tribute of gratitude offered to the patron of every ſcience, in which the intereſts of navigation and geography are concerned. I have the honour to ſubſcribe myſelf

YOUR MAJESTY's

Moſt faithful

and moſt devoted

Subject and Servant,

WILLIAM VINCENT.

PREFACE.

MUCH diſquiſition upon a brief narrative is the profeſſed deſign of the following work; a work which has encreaſed under my hands far beyond my calculation or deſign, and which I now publiſh incomplete, becauſe, from the various interruptions of an active life, whatever may be my wiſh and object, I cannot pledge myſelf to bring it to a concluſion.

SUCH encouragement as I had reaſon to expect has not been wanting to my former Labours. Popular reputation I neither courted or declined; emolument I neither coveted or diſclaimed; but if the approbation of many excellent and learned men be an object of ambition, I have had my reward.

To the cenſures which I incurred, I am not inſenſible; but if cenſure be not illiberal it is the part of prudence to turn it rather to the purpoſe of correction than offence. One charge only I ſhall notice; and

that, not becauſe it was unjuſt, but becauſe it originated in a miſapprehenſion of my deſign. In the few inſtances where I ventured upon etymology, I did not expect the ſeverity which I have experienced. I had diſclaimed all pretenſions to oriental learning; I had hazarded my own conjectures, in order to excite attention and curioſity in others; I had never reſted a ſingle deduction of importance on any imaginary interpretation of my own, and ſtill I have had the mortification to find that all my precautions were ineffectual. I thought that in treating of oriental queſtions, the conjectures of a claſſical man, even if erroneous, might have been pardonable; but I was miſtaken: I have ſeen my error, and I ſhall avoid a repetition of the offence. Nothing etymological will occur in the following pages, but what will be propoſed merely as matter of inquiry, or what can be referred to oriental authority for ſupport.

In the Voyage of Nearchus I traced the intercourſe with India to its ſource, a ſubject, as it has been called, "barren, but important:" and I now proſecute the ſame inquiry down to its completion, by the diſcoveries of

of Gama, under difficulties ſtill more diſcouraging to an Author. A work, relieved neither by the incidents of a voyage, or the occurrences of a journal, varied by no perſonal dangers or eſcapes, animated by no perſonal exertion or ability, however it may abound in information, can preſume but little upon its powers of attraction. Fidelity, labour, and reſearch, it is true, have their ſhare of merit; but the approbation which they claim muſt be derived from thoſe who can appreciate the value of talents which, though common to all, are exerciſed only by the few.

Reſearch, indeed, affords a pleaſure peculiar to itſelf; it preſents an idea of diſcovery to the imagination of the inquirer; an intellectual pleaſure, in which he flatters himſelf others will be deſirous to participate; and which, if he can communicate with ſatisfaction proportionate to his own, publication is not merely the indulgence of a propenſity, but the exerciſe of a ſocial duty.

I HAVE to return my thanks a ſecond time to Mr. Dalrymple, for his kindneſs in ſuffering me to copy two

of

of his charts; to Sir William Ouſeley, for favouring me with the ſheets of Ebn Haukel as they came from the preſs; to Dr. Charles Burney of Greenwich, and to Captain Francklin of the Bengal Eſtabliſhment. I have likewiſe been again more particularly obliged to the Biſhop of Rocheſter for his aſſiſtance in correcting the poſition of Meroè; on which ſubject, more probably will appear upon a future occaſion.

THE

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BOOK I.

PRELIMINARY DISQUISITIONS.

I. *Introduction.* — II. *Account of the Periplûs.* — III. *Homer.* — IV. *Herôdotus.* — V. *Ctêsias.* — VI. *Iambûlus.* — VII. *Agatharchides.* — VIII. *Hippalus.* — IX. *Age of the Periplûs.* — X. *Intercourse with India.*

I. NAVIGATION, perfected as it is at the present hour, opens all the maritime regions of the world to the knowledge of mankind; but in the early ages, personal intercourse was impracticable: the communication by sea was unexplored, and travelling by land was precluded by insecurity. The native commodities of one climate passed into another by intermediate agents, who were interested in little beyond the profits of the transit; and nations in a different hemisphere were known respectively, not by their history, but their produce.

Such was the ſituation of Europe in regard to India; the produce of each was conveyed to the other by channels which were unknown to both; and the communication by land through Tartary or Perſia, was as little underſtood, as the intercourſe by the Indian Ocean. That both exiſted in ſome ſenſe or other is undeniable; for the moſt ancient of all hiſtories mentions commodities which are the native produce of India, and which if they were known, of neceſſity muſt have been conveyed. What the means of conveyance were by land, or on the north, is a ſubject which does not enter into the plan of the following work; but the tranſport by ſea is a conſideration of all others the moſt important; it is dependent on a diſcovery common to all the nations of the world: the dominion of the ſea may paſs from one people to another, but the communication itſelf is opened once for all; it can never be ſhut.

That the Arabians were the firſt navigators of the Indian Ocean, and the firſt carriers of Indian produce, is evident from all hiſtory, as far as hiſtory goes back; and antecedent to hiſtory, from analogy, from neceſſity, and from local ſituation; out of their hands this commerce was transferred to the Greeks of Egypt, and to the Romans' when maſters of that country; upon the decline of the Roman power it reverted to the Arabians, and with them it would have remained, if no Gama had ariſen to effect a change in the whole commercial ſyſtem of the world at large.

It is the interval between the voyage of Nearchus and the diſcoveries of the Portugueſe which I intend to examine in the follow-

' Perhaps never to the Romans, but to the Greeks of Egypt under the power of the Romans.

ing

ing work; the baſis which I aſſume is the Periplûs of the Erythrêan Sea; and in commenting on this work, an opportunity will be given to introduce all the particulars connected with the general ſubject.

ACCOUNT OF THE PERIPLUS.

II. THE Periplûs of the Erythrêan Sea is the title prefixed to a work which contains the beſt account of the commerce carried on from the Red Sea and the coaſt of Africa to the Eaſt Indies, during the time that Egypt was a province of the Roman empire.

This work was firſt edited from the preſs of Froben at Baſle, in 1533, with a prefatory epiſtle by Gelenius; but from what manuſcript I have never been able to diſcover; neither is it known whether any manuſcript of it is now in exiſtence. The edition of Stuckius at Zurich, in 1577, and Hudſon in 1698, at Oxford, are both from the printed copy, which is notoriouſly incorrect, and their emendations remove few of the material difficulties[a]; beſides theſe, there is a tranſlation in the collection of Ramuſio, faithful indeed, as all his tranſlations are, but without any attempt to amend the text, or any comment to explain it; he has prefixed a diſcourſe however of conſiderable merit and much learning, which I have made uſe of wherever it could be of ſervice, as I have alſo of the commentaries of Stuckius, Hudſon, and Dodwell; but the author with whom I am moſt in harmony upon the whole,

[a] The two inexplicable difficulties are, Ἐιτινδιομμιωθισίας, p. 9. and ἀπὸ Ὀπώνης εἰς νότον πρόσχωρα, p. 7. See infra.

is Voſſius, who in his edition of Pomponius Mela has touched upon ſome of theſe points, and I wiſh we had the ground of his opinion in detail.

The Erythrêan Sea is an appellation given in the age of the author to the whole expanſe of ocean reaching from the coaſt of Africa to the utmoſt boundary of ancient knowledge on the eaſt; an appellation, in all appearance, deduced from their entrance into it by the ſtraits of the Red Sea, ſtyled 'Erythra'[3] by the Greeks, and not excluding the gulph of Perſia, to which the fabulous hiſtory of a king Erythras is more peculiarly appropriate.

Who the author was, is by no means evident, but certainly not Arrian of Nicomedia, who wrote the hiſtory of Alexander, whoſe writings have been the ſubject of my meditations for many years, and whoſe name I ſhould have been happy to prefix to the preſent work; HE was a man of eminence by birth, rank, talents, and education, while the author before us has none of theſe qualities to boaſt; but veracity is a recommendation which will compenſate for deficiency in any other reſpect: this praiſe is indiſputably his due, and to diſplay this in all its parts is the principal merit of the commentary I have undertaken.

[3] We are warned againſt the connection of Erythra with Erythrêan by Agatharchides, p. 4. Geog. Min Hudſon, Θάλαττα Ἐρυθρά, he ſays, ſignifies the Red Sea; Θάλαττα Ἐρύθρα, the ſea of Erythras, is the ocean which takes its name from king Erythra, according to the Perſian account. Salmaſius and Hudſon give little credit to Agatharchides for this intelligence. See note, ibid: both agree in ſuppoſing Edom, Red, to be the true etymology, the ſea of Edom, or Eſau, the Idumean Sea. Agatharchides ſays, it is not from the colour of the ſea, for it is not red, τὸ μὴ ἀπὸ τῆ χρώματος τὴν κλῆσιν κατασκευάζω, ἐρυθρὸς· (ὑγρὸς ἔστιν ἐρυθρὰ); this is well known, but it ought to be remembered that Im Suph of the Hebrews is the weedy ſea; and Lobo aſſerts, that Sufo is a name ſtill applied to a weed in this ſea uſed for dyeing red; this is probably indeed not the ſource of the etymology, but it is not unworthy of notice.

Arrian

Arrian of Nicomedia has left us the Paraplûs of Nearchus, and the Periplûs of the Euxine Sea, and was a name of celebrity to the early editors of Greek manuſcripts, long before the work now under contemplation was known; it is not impoſſible, therefore, if the Periplûs of the Erythrêan Sea was found anonymous, that it was attributed to an author whoſe name on ſimilar ſubjects was familiar. But if Arrian be the real name of the author now under contemplation, and not fictitious, he appears from internal evidence to have been a Greek, a native of Egypt, or a reſident in that country, and a merchant of Alexandria: he manifeſtly ſailed on board the fleet from Egypt, as far as the gulph of Cambay, if not farther; and, from circumſtances that will appear hereafter, is prior to Arrian of Nicomêdia by little leſs than a century. His work has long been appreciated by geographers, and is worthy of high eſtimation as far as the author can be ſuppoſed perſonally to have viſited the countries he deſcribes; ſome ſcattered lights alſo occur even in regard to the moſt diſtant regions of the eaſt, which are valuable as exhibiting the firſt dawn of information upon the ſubject.

Of this work no adequate idea could be formed by a tranſlation; but a compariſon of its contents with the knowledge of India, which we have obtained ſince Gama burſt the barrier of diſcovery, cannot but be acceptable to thoſe who value geography as a ſcience, or delight in it as a picture of the world.

The Periplûs itſelf is divided into two diſtinct parts, one comprehending the coaſt of Africa from Myos Hormus to Rhapta; the other, commencing from the ſame point, includes the coaſt of Arabia, both within the Red Sea and on the ocean; and then

paſſing

paſſing over to Guzerat runs down the coaſt of Malabar to Ceylon. It is the firſt part, containing the account of Africa, which I now preſent to the public; a work which, perhaps, I ought never to have undertaken, but which I hope to complete with the addition of the oriental part, (if bleſſed with a continuance of life and health,) by devoting to this purpoſe the few intervals which can be ſpared from the more important duties in which I am engaged. The whole will be comprehended in four books; the firſt conſiſting of preliminary matter, and the other three allotted reſpectively to Africa, Arabia, and India, the three different countries which form the ſubject matter of the Periplûs itſelf. In the execution of this deſign I ſhall encroach but little on the ground already occupied by Doctor Robertſon; but to Harris, and his learned editor Doctor Campbell, I have many obligations. I follow the ſame arrangement in my conſideration of the Greek authors, borrowing ſometimes from their materials, but never bound by their deciſions: where I am indebted I ſhall not be ſparing of my acknowledgments; and where I diſſent, ſufficient reaſons will be aſſigned. I could have wiſhed for the company of ſuch able guides farther on my journey; but I ſoon diverge from their track, and muſt explore my way like an Arab in the deſert, by a few ſlight marks which have eſcaped the ravages of time and the deſolation of war.

To a nation now miſtreſs of thoſe Indian territories which were known to Alexander only by report, and to the Greeks of Egypt only by the intervention of a commerce reſtricted to the coaſt, it may be deemed an object of high curioſity at leaſt, if not of utility, to trace back the origin and progreſs of diſcovery, and to examine

examine the minute and accidental cauſes which have led to all our knowledge of the eaſt; cauſes, which have by ſlow and imperceptible degrees weakened all the great powers of Aſia, which have diſſolved the empires of Perſia and Hindoſtan, and have reduced the Othmans to a ſecondary rank; while Europe has ariſen paramount in arts and arms, and Britain is the ruling power in India, from Ceylon to the Ganges:—a ſupremacy this, envied undoubtedly by our enemies, and reprobated by the advocates of our enemies. Anquetil du Perron and Bernoulli[4], exclaim at the injuſtice of our conqueſts; but who ever aſſerted that conqueſt was founded upon juſtice? The Portugueſe, the Hollanders, and the French were all intruders upon the natives, to the extent of their ability, as well as the Britiſh. India in no age ſince the irruptions of the Tartars and Mahomedans has known any power, but the power of the ſword; and great as the uſurpation of the Europeans may have been, it was originally founded in neceſſity. It is not my wiſh to juſtify the exceſs; but there are nations, with whom there can be no intercourſe without a pledge for the ſecurity of the merchant. The Portugueſe, upon their firſt arrival at Calicut, could not trade but by force: it was in conſequence of this neceſſity, that all the Europeans demanded or extorted the liberty of erecting forts for their factories; and this privilege, once granted, led the way to every encroachment which enſued. I notice this, becauſe the ſame danger produced the ſame effects from the beginning. It will appear from the Periplûs, that the Arabians in that age had fortified their factories on the coaſt of Africa, and the Portugueſe hiſtorians

[4] See Deſcription de l'Inde, in three vols. by Bernoulli, Berlin 1787, vol. ii.

mention

mention the ſame precaution uſed in the ſame country by the Arabs in the age of Gama. From this ſlender origin all the conqueſts of the Europeans in India have taken their riſe, till they have grown into a conſequence which it was impoſſible to foreſee, and which it is now impoſſible to control. No nation can abandon its conqueſts without ruin; for it is not only poſitive ſubtraction from one ſcale, but preponderancy accumulated in the other. No power can be withdrawn from a ſingle province, but that it would be occupied by a rival upon the inſtant. Nothing remains but to moderate an evil which cannot be removed, and to regulate the government by the intereſts of the governed. This imports the conquerors as much as the conquered; for it is a maxim never to be forgotten, that the Portugueſe loſt by their avarice the empire they had acquired by their valour; but of this too much:—our preſent buſineſs is not with the reſult of diſcovery, but its origin.

Voyages are now performed to the moſt diſtant regions of the world without any intervening difficulties but the ordinary hazard of the ſea. In the ancient world the caſe was very different: a voyage from Theſſaly to the Phaſis was an atchievement which conſecrated the fame of the adventurers by a memorial in the Heavens, and the paſſage from the Mediterranean into the Atlantic Ocean was to the Phenicians a ſecret of ſtate.

The reality of the Argonautic expedition has been queſtioned; but if the primordial hiſtory of every nation but one is tinctured with the fabulous, and if from among the reſt a choice is neceſſary to be made, it muſt be allowed that the traditions of Greece are leſs inconſiſtent than thoſe of the more diſtant regions of the earth. Oriental learning is now employed in unravelling the mythology of

India, and recommending it as containing the ſeeds of primeval hiſtory; but hitherto we have ſeen nothing that ſhould induce us to relinquiſh the authorities we have been uſed to reſpect, or to make us prefer the fables of the Hindoos or Guebres to the fables of the Greeks. Whatever difficulties may occur in the return of the Argonauts, their paſſage to Colchis is conſiſtent; it contains more real geography than has yet been diſcovered in any record of the Bramins or the Zendaveſta, and is truth itſelf, both geographical and hiſtorical when compared with the portentous expedition of Ram [5] to Ceylon; it is from conſiderations of this ſort that we muſt ſtill refer our firſt knowledge of India to Grecian ſources, rather than to any other; for whatever the contents of the Indian records may finally be found to have preſerved, the firſt mention of India that *we* have is from Greece, and to the hiſtorians of Greece we muſt ſtill refer for the commencement of our inquiries; their knowledge of the country was indeed imperfect, even in their lateſt accounts, but ſtill their very earlieſt ſhew that India had been heard of, or ſome country like India in the eaſt; a glimmering towards day is diſcoverable in Homer, Heródotus, and Ctêſias; obſcure indeed, as all knowledge of this ſort was, previous to Alexander, but yet ſufficient to prove that India was always an object of curioſity and inquiry.

HOMER.

III. The father of poetry is naturally the firſt object of our regard, his writings contain the hiſtory, the manners, and antiquities

5 See Maurice's Hiſtory of Hindoſtan, vol. ii. p. 243.

of his country; and though his information upon the point propoſed may be problematical, ſtill nothing that he has touched is unworthy of attention. When he conducts Neptune[6] into Ethiopia, he ſeems to place him in the centre between two nations both black, but both perfectly diſtinguiſhed from each other; and he adds, that they lived at the oppoſite extremities of the world eaſt and weſt; let us then place the deity in Ethiopia above the Cataracts of Syênè, and let a line be drawn eaſt and weſt, at right angles with the Nile; will it not immediately appear that this line cuts the coaſt of Nigritia on the weſt, and the peninſula of India on the eaſt? and though it may be deemed[7] enthuſiaſm to aſſert, that Homer conſidered theſe as his two extremities, and placed his two Ethiopick nations in theſe tracts, which are their actual reſidence at preſent, ſtill it is not too much to ſay, that the centre he has aſſumed is the moſt proper of all others, that the diſtant Ethiopians[8] to the eaſt of it, are Indians, and to the weſt, Negroes. Theſe two ſpecies are perfectly diſtinguiſhed by their make, by their features, and above all by their hair; whether Homer knew this characteriſtick difference does not admit of proof, but that he

[6] Θεοὶ δ' ἐλέαιρον ἅπαντες
Νόσφι Ποσειδάωνος, ὃδ' ἀσπιδχὲς μνέαιτο
Ἀντιθέῳ Ὀδυσῆϊ, πάρος ἣν γαῖαν ἱκέσθαι.
Ἀλλ' ὁ μὲν Αἰθίοπας μετεκίαθε τηλόθ' ἐόντας,
(Αἰθίοπας τοὶ δίχθὰ δεδαίαται, ἔσχατοι ἀνδρῶν,
Οἱ μὲν δυσομένου Ὑπερίονος, οἱ δ' ἀνιόντος.) Od. A. 19.

See the note upon this paſſage in Pope's tranſlation of the Odyſſey, where he adduces with great propriety the teſtimony of Strabo, to prove that all thoſe nations were accounted Ethiopians by the early Greeks, who lived upon the Southern Ocean from eaſt to weſt; and the authority of Ptolemy to ſhew, "that under the zodiack from eaſt to weſt, inhabit the Ethiopians black of colour." The whole paſſage in Strabo, and the various reading of Ariſtarchus and Crates, are well worth conſulting. Lib. i. p. 30.

[7] Ἔπειθ' ὅμηρος ὁ διὰ τοῦτο διαιρεῖ τοὺς Αἰθίοπας ἢ ὅτι τοὺς, Ἰνδοὺς ἤδει τοιούτους τοῖς σώμασιν· οὐδὲ γὰρ ΑΡΧΗΝ εἰδέναι τοὺς Ἰνδοὺς εἰκὸς ὅμηρον. Strabo, Lib. ii. p. 103. it is not probable that Homer knew India at all, certainly not as India, but as Ethiopia.

[8] Ἔσχατοι.

knew

knew they were of a ſeparate race is undeniable, and that he placed them eaſt and weſt at the extent of his knowledge, is an approximation to truth, and conſiſtent with their actual poſition at the preſent hour.

HERODOTUS.

IV. THE diſtinction which Homer has not marked, is the firſt circumſtance that occurred to Heródotus; he mentions the eaſtern Ethiopians conſidered as Indians, and differing from thoſe of Africa expreſsly by the characteriſtick[9] of long hair, as oppoſed to the woolly head of the Cafre. We may collect alſo, with the aſſiſtance of a little imagination, the diſtinct notice of three ſorts of natives, which correſpond in ſome degree with the different ſpecies which have inhabited this country in all ages. The Padêi on the north[10], who are a ſavage people reſembling the tribes which are ſtill found in the northern mountains, mixed with Tartars perhaps, and approaching to their manners; a ſecond race living far to the ſouth, not ſubject to the Perſian empire[11], and who abſtain from all animal food; under this deſcription we plainly

[9] Lib. vii. p. 541.

[10] If the ſituation of the Padêi were aſcertained we might inquire about the manners attributed to them by the hiſtorian; but he mentions only ſome tribes that live upon the marſhes formed by *the* river (that is, probably the Indus), and then the Padêi to the eaſt of theſe; this places them on the north of India: as to all appearance the marſhes noticed are thoſe formed by the rains in the Panjcab, but how far eaſt beyond this province we are to fix the Padêi is indefinite. I cannot ſuppoſe that Heródotus had received any report of the nations north of the Himmalu Mountains, or elſe I ſhould offer a conjecture to the Orientaliſts, whether Padêi, converted into Pudêi, might not allude to Budtan; for a and u are convertible, as is evident in Multan, which is only another form of reading Mul-tan for Mal-tan or Malliſtan, the country of the Malli.

[11] Lib. iii. p. 248.

diſcover the real Hindoos; and a third inhabiting Pactýia and Caſpatýrus, who reſemble the Bactrians in their manners, dreſs, and arms, who are ſubject to Perſia, and pay their tribute in gold; theſe, whether we can diſcover Caſpatýrus or not, are evidently the ſame as thoſe tribes which inhabit at the ſources weſt of the Indus; who never were Hindoos, but poſſeſs a wild mountainous country, where their faſtneſſes qualify them for a predatory life, and where they were equally formidable to Alexander, to Timour, and Nadir Shah [12]; they reſemble to this day the Bactrians, as much as in the time of Heródotus, or rather the Agwhans in their neighbourhood; and are as brave as the one, and as ferocious as the other. Theſe tribes it is more neceſſary to mark, becauſe it will prove that the Perſians never were maſters of India properly ſo called, but of that country only which is at the ſource of the Indus. Whether they penetrated beyond the main ſtream, that is the Indus or the Attock itſelf, muſt be left in doubt; but Pactýia, according to major Rennell, is Peukeli; and if Caſpatýrus be the ſame as the Caſpíra of Ptólemy, there is ſome ground for ſuppoſing that city correſpondent to Multan. Should theſe conjectures be confirmed by future inquiry, it would prove that the Perſians did paſs the Attock, and were really maſters of the Panjeab and Multan; and the tribute which they received, equal to half the revenues of the empire, affords ſome reaſon for ſuppoſing this to be the fact. Much depends upon the iſſue of this inquiry, becauſe the Attock, or *forbidden* river, has been the weſtern boundary of Hindoſtan in all ages; if the Perſians paſſed it, India

[12] Nadir was glad to compound with theſe tribes, to let him paſs unmoleſted with the plunder of the unhappy Mahomed Shah.

was

was tributary to them; if they did not, the tribes weſt of the Attock only were ſubjected, and they were never Hindoos, however eſteemed ſo by the Perſians. Another circumſtance dependent on this inquiry, is the voyage of Scylax, ſaid to have commenced from Pactýia and Caſpatýrus, and to have terminated in the Gulph of Arabia. There are two inconſiſtencies in the report of this voyage by Heródotus; the firſt, that he mentions the courſe of the Indus to the eaſt [13], which is in reality to the ſouth-weſt: the ſecond, that he ſuppoſes Darius [14] to have made uſe of the diſcoveries of Scylax for the invaſion of India. Now if Darius was maſter of the Attock, Peukeli, and Multan, he wanted no information concerning the entrance into India, for this has been the route of every conqueror; or if he obtained any intelligence from Scylax it is certain that neither he, nor his ſucceſſors ever availed themſelves of it, for any naval expedition. The Perſians were never a maritime people. Hiſtory no where ſpeaks of a Perſian fleet in the Indian ocean, or even in the Gulph [15] of Perſia; and in the Mediterranean, their ſea forces always conſiſted of Phenicians, Cyprians, or Egyptians.

Far is it from my wiſh wantonly to diſcredit any hiſtorical fact ſupported on the teſtimony of ſuch a writer as Herodotus; but there

[13] See Hyde Rel. Vet. Perſarum, cap xxiii. who is half diſpoſed to make Scylax navigate the Ganges on account of its eaſtern direction. He heſitates only becauſe Scylax muſt have returned to the north again from C. Comorin to ſurvey the mouths of the Indus. See Weſſeling ad Herod. lib. iv. p. 300. note 34.

[14] Hyſtaſpes father of Darius is the Guſhtaſp of the Zendaveſta, and king of Balk or Bactria; but I have never been able to diſcover, that the Perſian Darius of the Greeks, or his father Hyſtaſpes, can be identified with the Bactrian Guſhtaſp of the Zende or Oriental writers; and I ſee Richardſon in the preface to his Perſian Dictionary aſſigns no real antiquity to the Zende of Anquetil du Perron.

[15] I ſpeak of a navy, not ſhips for trade.

are

are inſuperable difficulties in admitting this voyage of Scylax, or that of the Phenicians round the continent of Africa; the greateſt of all is, that no conſequences accrued from either. That Heródotus received the account of both from Perſians or Egyptians, is undeniable; that they were performed is a very different conſideration. I do not dwell upon the fabulous[16] part of his account of India; becauſe even his fables have a foundation in fact[17]; but I cannot believe from the ſtate of navigation in that age, that Scylax could perform a voyage round Arabia, from which the braveſt officers of Alexander ſhrunk; or that men who had explored the deſert coaſt of Gadroſia, ſhould be leſs daring than an unexperienced native of Caryanda. *They* returned with amazement from the ſight of Muſſendon and Ras-al-had, while Scylax ſucceeded without a difficulty upon record. But the obſtacles to ſuch a voyage are numerous, firſt, whether Pactyia be Peukeli, and Caſpatyrus, Multan: ſecondly, if Darius were maſter of Multan, whether he could ſend a ſhip, or a fleet, down the Indus to the ſea, through tribes

[16] What the fable is of the ants which turned up gold, and the manner of collecting it by the natives, I cannot determine; but it is poſſible, that as our knowledge of India increaſes, it will be traced to its ſource; and one thing is certain, that it is a tale exiſting from the time of Heródotus to the age of De Thou; it is countenanced likewiſe in the Letters of Buſbequius, who ſaw one of theſe ants [ſkins] ſent as a preſent from the king of Perſia to the Porte. See Larcher, tom. iii. p. 339. Another fable, totally diſſonant to the ordinary manners of the Hindoos, I ſhall give in the words of the hiſtorian, Μιξις δὲ τουτων ἡ Ἰνδὴ τῶν κατὰλιξα πάντων ἰμφαιής ἐστι, κατάπερ τῶν πρεβάτων, lib. iii. 248. quod populo univerſo nequaquam objiciendum eſt, ſed originem ducit ex illo ſpurciſſimo commercio fœminarum prolis deſiderio laborantium, cum Hylobiis et Heautontimoreumenis. I can, upon ſimilar principles, account for the greateſt part of the fables imputed to Megaſthenes, Daimachus, Oneſicritus. Lt. Wilford explains Ctêſias's fable of the Martichora.

[17] Not all indeed, for his voyage of Hercules to Scythia is mere mythology. I do not uſe this to diſcredit the voyage of Scylax; my object is to mark fable as fable, and to ſelect the truths mixed with it for obſervation. See Herod. lib. iv. p. 283. ed. Weſſ.

where

where Alexander fought his way at every ſtep: thirdly, whether Scylax [18] had any knowledge of the Indian Ocean, the coaſt, or the monſoon: fourthly, if the coaſt of Gadróſia were friendly, which is doubtful, whether he could proceed along the coaſt of Arabia, which muſt be hoſtile from port to port. Theſe and a variety of other difficulties [19], which Nearchus experienced, from famine, from want of water, from the built of his veſſels, and from the manners of the natives, muſt induce an incredulity in regard to the Perſian account, whatever reſpect we may have to the fidelity of Heródotus.

CTESIAS.

V. NEXT to Heródotus, at the diſtance of little more than ſixty years, ſucceeds Ctêſias. He reſided a conſiderable time in the court of Perſia, and was phyſician to Artaxerxes Mnemon. What opportunities he had of obtaining a knowledge of India muſt have been accidental, as his fables are almoſt proverbial, and his truths very few; his abbreviator Photius, from whoſe extracts only we have

[18] That there was ſuch a perſon as Scylax, that he was in India, and that his account of that country was extant, appears from Ariſtotle's Politicks, lib. vii. in Dr. Gillies's tranſlation, book iv. p. 240. I learn likewiſe from Larcher, that the Baron de Sainte Croix defends the work which now bears the name of Scylax as genuine, in a diſſertation read before the Academy of Inſcriptions; but I know not whether that diſſertation be publiſhed. See Larcher's Herod. tom. iii. p. 407. I have one objection to its authenticity, which is his mention of Dardanus, Rhêtêum, and Ilium in the Troad, p. 35. for there is great doubt whether Rhêtêum was in exiſtence in the time of the real Scylax; and of India, he ſays nothing in the treatiſe now extant.

[19] Strabo ſays, Poſidonius diſbelieved this whole hiſtory of Scylax, though he believed the voyage of Eudoxus, lib. ii. p. 100. The fact is, there were ſo many of theſe voyages pretended, and ſo few performed, that the beſt judges did not know what to believe; Strabo believed nothing of the circumnavigation of Africa. See lib. i. p. 32.

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an account of his works, ſeems to have paſſed over all that he ſaid of Indian manners; and to have preſerved only his tales of the marvellous. The editor[20], however, is very deſirous of preſerving the credit of his author, and that part of the work which relates to Perſia is worthy of the eſtimation he aſſigns it; but we are not bound to admit his fable of the martíchora, his pygmies, his men with the heads of dogs and feet reverſed, his griffins and his four-footed birds as big as wolves.—Theſe fictions of imagination indeed are ſtill repreſented on the walls of the Pagodas; they are ſymbols of mythology, which the Bramins pointed out to the early viſitors of India, and became hiſtory by tranſmiſſion.

The few particulars appropriate to India, and conſiſtent with truth, obtained by Ctêſias[21], are almoſt confined to ſomething reſembling a deſcription of the cochineal plant, the fly, and the beautiful tint obtained from it, with a genuine picture of the

[20] Ctéſias ſays, there is a pool which is annually filled with liquid gold; that an hundred meaſures (πεχόαι) of this are collected, each meaſure weighing a talent; at the bottom of this pool is found iron, and of this iron he had two ſwords, one preſented to him by the king, and the other by Parysàtis the king's mother. The property of theſe ſwords was, that when fixed in the ground they averted clouds, hail, and tempeſts; he ſaw the king make the experiment, and it ſucceeded.

Now whatever a traveller ſays he ſaw with his own eyes, (unleſs there are other reaſons for doubting his veracity,) is deſerving of credit, but when he ſees things that imply an impoſſibility, all faith is at an end.—That there was ſome ſuperſtitious practice in Perſia of fixing ſwords in the ground for this purpoſe, may be believed, but that theſe ſwords muſt be wrought of metal from the golden fountain, or that they had this effect, is a different conſideration; the words are, ᾧ ἰδίῃ αὐτὸν ταῦτά φησι, βασιλέως δὶς ποιήσαντος.—Why does Weſſeling tell me to believe this? nay I would have believed it, if he had not aſſerted the ſucceſs of the experiment, but only that the king tried it. Perhaps ſome ingenious modern may hereafter quote περσέων ἀπορρήτους, to prove that iron was known to be a conductor in that age, and that electricity was concerned in this experiment. See p. 827. Weſſeling's ed. of Herod: and Ctéſias.

[21] Some other circumſtances recorded by Ctéſias may be collected from Diodôrus, but I have confined myſelf to his own work.

monkey

monkey and the parrot; the two animals he had doubtleſs ſeen in Perſia, and flowered cottons emblazoned with the glowing colours of the modern chintz, were probably as much coveted by the fair Perſians in the Harams of Suſa and Ecbatana, as they ſtill are by the ladies of our own country.

Ctêſias is contemporary with Xenophon, and Xenophon is prior to Alexander by about ſeventy years; during all which period, little intelligence concerning India was brought into Greece; and if the Macedonian conqueſts had not penetrated beyond the Indus, it does not appear what other means might have occurred of diſpelling the cloud of obſcurity in which the eaſtern world was enveloped.

The Macedonians, as it has been ſhewn in a former work, obtained a knowledge both of the Indus and the Ganges; they heard that the ſeat of empire was, where it always has been, on the Ganges, or the Jumna. They acquired intelligence of all the grand and leading features of Indian manners, policy, and religion: they diſcovered all this by penetrating through countries where poſſibly no Greek had previouſly ſet his foot; and they explored the paſſage by ſea, which firſt opened the commercial intercourſe with India to the Greeks and Romans, through the medium of Egypt and the Red Sea; and finally to the Europeans by the Cape of Good Hope.

It matters not that the title of fabuliſts is conferred upon Megaſthenes, Nearchus, and Oneſicritus, by the ancients; they publiſhed more truths than falſehoods, and many of their imputed falſehoods are daily becoming truths, as our knowledge of the country is improved. The progreſs of information from this origin is materi-

ally connected with the object we have proposed, and it cannot be deemed superfluous to pursue it through the chain of authors, who maintain the connection till the discovery of the passage across the ocean by means of the monsoon.

Megasthenes and Daimachus[22] had been sent as embassadors from the kings of Syria to Sandrocottus and his successor Allitróchades; the capital of India was in that age at Palibóthra, the situation of which, so long disputed, is finally fixed, by Sir William Jones, at the junction of the Saone and the Ganges. These embassadors, therefore, were resident at a court in the very heart of India, and it is to Megasthenes in particular that the Greeks are indebted for the best account of that country. But what is most peculiarly remarkable is, that the fables of Ctêsias were still retained in his work; the Cynocéphali, the Pigmies, and similar fables were still asserted as truths. It is for this reason that Strabo[23] prefers the testimony of Eratosthenes and Patrócles, though Eratosthenes was resident at Alexandria, and never visited India at all; and though Patrócles never saw any part of that country beyond the Panjeab, still their intelligence he thinks is preferable, because Eratosthenes had the command of all the information treasured in the library of Alexandria; and Patrocles was possessed of the materials which were collected by Alexander himself, and which had been communicated to him by Xeno the keeper of the archives.

It is inconceivable how men could live and negotiate in a camp on the Ganges, and bring home impossibilities as truth; how

[22] Bruce says, Megasthenes and Denis, from Ptolemy king of Egypt, vol. i. p. 461. This seems as if he followed French authority, which misled him; he is not in the habit of citing his authorities.

[23] Lib. ii. in initio, p. 70.

Megasthenes

Megaſthenes could report that the Hindoos had no uſe of letters[24], when Nearchus had previouſly noticed the beautiful appearance of their writing, and the elegance of character, which we ſtill diſcover in the Shanſkreet[25]; but the fabulous accounts of Ctêſias were repeated by Megaſthenes, profeſſedly from the authority of the Bramins; and whatever reaſon we have to complain of his judgment or diſcretion, we ought to acknowledge our obligations to him as the firſt author who ſpoke with preciſion of Indian manners, or gave a true idea of the people.

It is not poſſible to enter into the particulars of all that we derive from this author, but the whole account of India, collected in the fifteenth book of Strabo, and the introduction to the eighth book of Arrian, may juſtly be attributed to him as the principal ſource of information. His picture is, in fact, a faithful repreſentation of the Indian character and Indian manners; and modern obſervation contributes to eſtabliſh the extent of his intelligence, and the fidelity of his report.

This ſource of intelligence, commencing with Alexander and concluding with Megaſthenes and Daimachus, may be claſſed under the title of Macedonian, as derived from Alexander and his ſucceſſors, and ſuch knowledge of the country as could be acquired by a haſty invaſion, by the inſpection of travellers and embaſſadors, or by the voyage down the Indus, the Macedonians ſeem to have

[24] Strabo, lib. xv. p. 709. an imputation on Megaſthenes, which the good father Paolino is very unwilling ſhould attach to him. See his Diſſertation De veteribus Indis, in anſwer to Auguſtinus Georgius, author of the Thibet Alphabet, p. 12.

[25] Shanſkreet, or Sanſcrit, is the mode of writing this word, which has prevailed among our Engliſh writers. I always prefer the moſt popular, but Paolino writes Sams Crda, lingua perfecta, p. 258. or Krda = perfecta, Sam = ſimul, coëval with creation.

attained with ſingular attention, and, notwithſtanding particular errors, to have conveyed into Europe with much greater accuracy than might have been expected.

The voyage of Nearchus opened the paſſage into India by ſea, and obviated the difficulties of penetrating into the eaſt by land, which had previouſly been an inſurmountable barrier to knowledge and communication. But it is to Oneſicritus [26] we trace the firſt mention of Tapróbana, or Ceylon, and what is extraordinary, the dimenſions he has aſſigned to it, are more conformable to truth [27], than Ptolemy had acquired four hundred years later, and at a time when it was viſited annually by the fleets from Egypt; but on this ſubject more will be ſaid in its proper place.

IAMBÚLUS.

VI. The mention of Ceylon naturally introduces us to the voyage of Iambúlus [28], becauſe, fabulous as his account is, it is ſtill moſt

[25] To Oneſicritus only, if we follow Strabo or Pliny, vi. 24. who, he ſays, mentions elephants there larger and more fit for war than elſewhere, a truth to this day. Megaſthenes notices a river, gold and pearls, and that the people are called Palêógoni. Eratoſthenes ſeems to have enlarged upon the ſize given it by Oneſicritus, for inſtead of 625 miles, he ſays it is 875 miles long, 625 broad. In Pliny's age the north eaſtern ſide was grown to 1250 miles, and the error was always on the increaſe till the time of Ptolemy. Pliny adds, that Rachia [Rajah] was the head of the embaſſy to Rome, and that Rachia's father had viſited the Seres. One incidental circumſtance ſeems to mark Arabian intercourſe previous to the voyage of Annius Plocamus's freed man. Regi, cultum Liberi Patris, cæteris, *Arabum*, the king worſhipped Bacchus, the people on the coaſt followed the rites of the *Arabians*. The king wore the garment of India, the people (on the coaſt) that of the *Arabians*. He adds alſo, that Hercules was worſhipped, that is, Bali, the Indian Hercules. Whence both Palêógoni, and Palêſimoondus. This, however, ought not to be aſſerted without giving due weight to Paolino, who derives Palêſimoondus from Paraſhri mandala, the kingdom of Paraſhri, and Paraſhri is the Indian Bacchus.

[27] He makes it 625 miles, without mentioning length or breadth; it is in reality near 280 miles long, and 138 broad; but Ptolemy extends it to more than 966 miles from north to ſouth, 759 from weſt to eaſt.

[28] See Harris, vol. i. 383. and Ramuſio.

probably

probably founded on fact, and becauſe Diodôrus has ranked it as hiſtory.

Lucian [29], perhaps, formed a better judgment when he claſſed him with the writers of fiction; for his account of the Fortunate Iſlands and of Ceylon ſtand almoſt on the ſame ground; the circumference of the Iſland he ſeems to give at five thouſand ſtadia from Oneſicritus, and the navigation acroſs the ocean from Ethiopia he derived from the general knowledge that this voyage had been performed, or imputed, from a very early age; his departure from Ceylon to the Ganges, his arrival at Palibóthra, and his intercourſe with the king, who was an admirer [30] of the Greeks, may be referred to Megaſthenes and Daimachus, while his fictions of impoſſibilities are all his own. Notwithſtanding all this there are ſome alluſions to characteriſtick truths, which though they do not beſpeak the teſtimony of an eye-witneſs, prove that ſome knowledge of the iſland had reached Egypt, and this at a time previous to the diſcovery of the monſoon; for Iambúlus muſt be antecedent to Diodôrus, and Diodôrus is contemporary with Auguſtus. It is this

[29] Luc. de vera hiſtoria, i. cap. 3. γνώριμον μὲν ἅπασι τὸ ψεῦδος πεποιήμενος ἐκ ἀτιμῶς δ' ὅμως σπουδῇ τὴν ὑπόθεσιν, Weſſeling in lib. ii. 167. Diod.

[30] Φιλέλλην, though there be nothing in this word to raiſe admiration in general, but at the ſtrangeneſs of the circumſtance, how a king of Palibóthra ſhould know enough of Greeks to be fond of the nation: there is ſtill a ſecret alluſion of much curioſity, which is this, the native chiefs who raiſed themſelves to independence on the ruins of Syrian monarchy, (whether from the number of Greeks in the eaſt, or from the popularity of the Grecian ſovereignty, is hard to determine,) aſſumed the title of Φιλέλλην; and this term is ſtill found inſcribed in Greek letters upon the coins of the firſt uſurpers of the Parthian dynaſty. See Bayer. p. 105. It ſeems, therefore, highly probable, that the inventor of this tale of Iambúlus knew that ſome of the eaſtern potentates were ſtyled lovers of the Greeks; and he has ignorantly applied this title to a ſovereign of India, which appertained properly to thoſe only who reigned in the north of Perſia. This ſeems an additional proof of the impoſture the author knew a curious piece of ſecret hiſtory, but did not know how to apply it.

ſingle

ſingle circumſtance that makes it requiſite to notice ſuch an author. The truths alluded to are, I. The ſtature of the natives, and the flexibility of their joints. II. The length of their ears, bored and pendent. III. The perpetual verdure of the trees. IV. The attachment of the natives to aſtronomy. V. Their worſhip of the elements, and particularly the ſun and moon. VI. Their cotton garments. VII. The cuſtom of many men having one wife in common, and the children being entitled to the protection of the partnerſhip. (This practice is ſaid by Paolino [31] to exiſt ſtill on the coaſt of Ceylon, and is apparently conformable to the manners of the Nayres on the continent.) VIII. Equality of day and night. IX. The Calamus or Maiz. And it is ſubmitted to future inquiry, whether the particulars of the alphabet may not have ſome alluſion to truth; for he ſays, the characters are originally only ſeven, but by four varying forms or combinations they become twenty-eight.

The chief reaſon to induce a belief, that Iambúlus never really viſited Ceylon, is, that he ſhould aſſert he was there ſeven years, and yet that he ſhould not mention the production of cinnamon. There is no one circumſtance that a Greek would have noticed with more oſtentation than a diſcovery of the coaſt where this ſpice grew; but Iambúlus, like the reſt of his countrymen, if he knew the produce, adjudged it to Arabia, and never thought of this leading truth, as a ſanction to the conſtruction of his fable; he is deſcribed by Diodôrus as the ſon of a merchant, and a merchant himſelf, but poſſeſſed of a liberal education. In trading to Arabia

[31] Paolino was a Romiſh miſſionary in Travencore, for thirteen or fourteen years; his work was publiſhed at Rome: he is ſometimes miſtaken on claſſical queſtions, but ſtill it is a learned and inſtructive work, p. 378.

for ſpices, he was taken priſoner and reduced to ſlavery; he was carried off from Arabia by the Ethiopians, and by them committed to the ocean, to be driven wherever the winds might carry him; and in this caſe his reaching Ceylon would be the leaſt improbable[32] part of his narrative. No means occur to ſettle the date of this hiſtory, but the alluſion to known truths makes it curious, even if it be a novel. Theſe truths could have been obtained only from report in the age of Diodôrus[33], and the wonder is, that it contains a circumſtance dependent on the monſoon, of which Diodôrus was himſelf ignorant, and which was not known to the Greeks and Romans till near a century later. I dare not claim it as a *proof*, that the Arabians ſailed by the monſoon at this time, but the ſcene is laid in Arabia, and the paſſage is made from the coaſt of Africa, as that of the Arabians really was; and it is natural to conclude, that the Arabians did really ſail to Ceylon in that age, though the Greeks and Romans did not. The embaſſy from Pandion to Auguſtus cannot be a fiction, and the embaſſadors muſt have ſailed from India, either on board Arabian ſhips, which frequented their harbours, or in Indian veſſels which followed the ſame courſe. All this is previous to Hippalus, and the whole taken together is a

[32] P. Luigi Maria de Geſu, a Carmelite, afterwards Bp. of Uſula, and Apoſtolick Vicar of the coaſt of Malabar, coming round Cape Comorin in a native veſſel, was carried over to the Maldives, and thence to the coaſt of Africa. Paolin. p. 83. Annius Plocamus was carried in a contrary direction from Arabia to Ceylon; and in fact, whenever a veſſel, on either coaſt, is by accident forced out of the limit of the land and ſea breeze, ſhe will be caught by the monſoon, and carried over to the oppoſite continent. To accidents of this ſort we may impute a very early diſcovery of the monſoons by Arabians or Ethiopians, long before Hippalus imparted it to the Greeks and Romans.

[33] Harris or Dr. Campbell are my precurſors in this examination of Iambúlus and Agatharchides. They gave credit to Iambúlus. I here give the reaſons for my diſſent.

confirmation

confirmation of an Arabian navigation previous to that from Egypt. That a novel ſhould contain hiſtorical facts and truths is natural, and will not be denied by thoſe who are acquainted with Heliodorus. Many Ethiopick cuſtoms[34] are noticed in that work, which are true to this day. After all, the novel of Iambúlus is not ſo ſurprizing in itſelf, as its exiſtence in the page of Diodôrus.

AGATHARCHIDES.

VII. AGATHARCHIDES[35], the next object of our conſideration, is an author of far different eſtimation; he was preſident of the Alexandrian library, and is always mentioned with reſpect by Strabo, Pliny, and Diodôrus[36]. His work on the Erythrêan or Red Sea, is preſerved in an extract of Photius, and copied almoſt in the ſame terms, but not without intermixture[37], by Diodôrus. Diodôrus indeed profeſſes to derive his information from the royal commentaries, and original viſitors of the countries he deſcribes; but that he copies Agatharchides is evident, by a compariſon of this part of his work with the extract of Photius; or, perhaps, con-

[34] The Nagareet drums, ſo often noticed by Bruce, are diſcoverable in this work.

[35] It is with much regret that I confeſs my neglect of this author, from whom I might have corroborated many circumſtances in the voyage of Nearchus. A curſory peruſal had induced me to view his errors in too ſtrong a light; if juſtice be done to him on the preſent review, it is no more than he merits.

[36] Diodôrus ſpeaks of Agatharchides and Artemidôrus, as the only authors who have written truth concerning Egypt and Ethiopia, Lib. iii. 181.

[37] In confirmation of this aſſertion, we may mention a paſſage, lib. iii. p. 208. Diod. where an alluſion is evidently made to the ſeparation of the waters of the Red Sea, as recorded by Moſes; it is received in this ſenſe by Grotius, Bochart, and Weſſeling; and if this was in Agatharchides, it could hardly have been omitted by Photius, a chriſtian biſhop: if it was not in Agatharchides, it is plain that Diodôrus joined other authorities to his. This is given as a conjecture, but it is of weight.

ſidering Agatharchides as librarian, he conceived that his work was founded on the commentaries or archives of the Alexandrian depoſitory. Strabo[38] likewiſe follows Agatharchides in almoſt all that relates to Ethiopia, the countries ſouth of Egypt, and the weſtern coaſt of Arabia[39], or rather, as Weſſeling has obſerved, with his uſual accuracy, both copy Artemidorus[40] of Epheſus[41], who is the copyiſt of Agatharcides.

It is neceſſary to pay more attention to this author, as he is apparently the original ſource from whence all the hiſtorians drew, previous to the diſcovery of the monſoon; his work forms an epoch in the ſcience, and when Pliny comes to ſpeak of the diſcoveries on the coaſt of Malabar in his own age, and adds, that the names he mentions are new, and not to be found in previous writers; we ought to conſider him as ſpeaking of all thoſe, who had followed the authority of the Macedonians, or the ſchool of Alexandria, of which, in this branch of ſcience, Eratoſthenes and Agatharchides were the leaders.

Eratoſthenes was librarian of Alexandria under Ptolemy Euergetes I. and died at the age of eighty-one, 194, A. C. He was rather an aſtronomer and mathematician than a geographer, and is honoured with the title of ſurveyor of the earth[42], as the firſt aſtronomer who meaſured a degree of a great circle[43], and drew the firſt parallel of latitude, the ſublime attempt on which all the accuracy of the ſcience depends.

[38] Lib. xvi. p. 769.

[39] Diod. lib. iii. p. 205. not. *καλαμίνη*, &c. but Strabo cites both, p. 769.

[40] Id. 774.

[41] There are two Artemidorus's of Epheſus. See Hoffman in voce. This Artemidorus lived in the reign of Ptolemy Lathyrus, anno 169, A. C.

[42] See his eulogium in Pliny, lib. ii. c. 112.

[43] Hipparchus is later than Eratoſthenes; he is ſuppoſed to have lived to 129, A. C.

It appears from Strabo and Pliny, that Eratoſthenes ſpeaks of Meroe, India, and the Thinæ, and of the latter as placed incorrectly in the more ancient maps; how this nation, which was the boundary of knowledge in the age of Ptolemy, (and which, if it does not intimate China, is at leaſt as diſtant as the golden Cherſoneſe of Malacca,) found its way into charts more early than Eratoſthenes, will be conſidered in its proper place; but his knowledge of Meroe or Abyſſinia is derived from Dalion, Ariſtocreon, and Bion, who had been ſent by Philadelphus, or his ſucceſſors, into that country, or from Timoſthenes[44], who ſailed down the coaſt of Africa as low as Cernè[45]. This information concerning India muſt be deduced from the Macedonians, but his information is confined on the ſubject of Oriental commerce; the ſpherical figure of the earth ſeems to be the grand truth he was deſirous to eſtabliſh, and his geographical inquiries were perhaps rather the baſis of a ſyſtem, than a delineation of the habitable world.

Agatharchides, according to Blair, muſt, though younger, have been contemporary with Eratoſthenes; he was a native of Cnidus in Caria, and flouriſhed 177, A. C. But Dodwell[46] brings him down much lower, to 104, A. C. which can hardly be true, if Artemidorus[47] copied his work, for the date of Artemidorus is attributed to 104, A. C. alſo, the ſame year which Dodwell gives to Agatharchides.

[44] What credit Timoſthenes deſerves is du- See infra.
bious, as Pliny mentions, that he makes the Red Sea only four days ſail in length and two broad, if I underſtand the paſſage. Lib. vi. c. 33.

[45] Sometimes ſuppoſed to be Madagaſcar.

[46] Bruce ſays, in the reign of Ptolemy IX. 100, A. C. but does not ſay a word of the contents of his work, i. 467.

[47] See Diod. iii. 181. Weſſel. note.

Theſe

Theſe dates are of importance, if we aſſume the work of Agatharchides as an epoch, which in fact it ſeems to be, and the principal authority for the ſubſequent hiſtorians, previous to the diſcovery of Hippalus; his work it is by no means neceſſary to vindicate in all its parts, but it contains many peculiar truths [48] confirmed by modern experience, and the firſt genuine characteriſticks of Abyſſinia that occur in hiſtory.

Some of theſe circumſtances, though not connected with the purpoſe before us, cannot be ſuperfluous, as they contribute to eſtabliſh the credit of the work; theſe are, I. The gold mines worked by the Ptolemies on the coaſt of the Red Sea; the proceſs; the ſufferings of the miners; the tools [49] of copper found in them, ſuppoſed to have been uſed by the native Egyptians, prior to the Perſian conqueſt. II. In Meroe, or Abyſſinia, the hunting of elephants, and hamſtringing them; the fleſh cut out of the animal alive [50]. III. The fly, deſcribed as the ſcourge of the country in

[48] Great moderation is due in judging all writers who ſpeak of a country in the firſt inſtance. Things are not falſe becauſe they are ſtrange, and an example occurs in this author, which ought to ſet raſh judgment on its guard. Agatharchides mentions the worm which is engendered in the legs, and is wound out by degrees. Plutarch ridicules the aſſertion, and ſays, it never has happened and never will. In our days every mariner in the Red Sea can vouch the truth of the fact; and if Plutarch had lived to be acquainted with our illuſtrious Bruce, he would have ſhewn him that he carried with him the marks and effects of this attack to the grave. See Teſtimonia. Agathar. De Rub. Mari. Hudſon, p. 1. See alſo Diodôrus, lib. iii. p. 199. Πολλὰ δὲ καὶ ἄλλα τούτων παραδόξοτερα συντελεῖται, τοῖς μὲν ἀγνοοῦσιν ἄπιστα, τοῖς δὲ πεῖραν εἰληφόσιν, ἀνυπομόνητα.

[49] A very extraordinary fact, and ſimilar to what has happened in our own age. According to Col. Vallancy, inſtruments have been found in the mines in Ireland which he ſuppoſes to be Phenician; and others have been found in the mines in Wales, which are certainly Roman.

[50] Strabo alſo mentions the Κρεωφάγοι, which perhaps intimates eaters of *raw* fleſh, and the exciſio fœminarum, in a paſſage where he ſeems to be copying Agatharchides or Artemidorus. The original here does not ſpecify the fleſh from living oxen, but elephants. See Strabo, lib. xvi. p. 771.

the ſame manner as by Bruce. IV. Something like the enſete tree of Bruce. V. Locuſts deſcribed as food. VI. Troglodytes. VII. The rhinoceros, the camelopard, apes [51] ſtrangely called ſphinxes", the crocotta [51] or hyena; ſeveral other minute particulars might be enumerated, but not without a tincture of the fabulous.

His account of the coaſt is our more immediate concern; this commences at Arsínoè, or Suez, and goes down the weſtern coaſt of the Red Sea to Ptolemáis Thêrôn [52], it mentions Myos Hormus, but takes no notice of Berenícè. The particulars of this navigation are very ſcanty, but ſtill one fact is ſubſtantiated, that the ordinary courſe of trade carried on, went no lower than Ptolemáis, and was confined more eſpecially to the importation of elephants.

Ptolemáis is the Ras Ahchaz of d'Anville, the Ras Ageeg of Bruce, in latitude 18°. 10′. [53] and full three hundred and fifty miles ſhort of the ſtraits of Bab-el-Mandeb. A proof that whatever Ptolemy Philadelphus had diſcovered of the coaſt of Africa, it was now little viſited by the fleets from Egypt, but that there was ſome ſort of commerce is certain; Strabo cites Eratoſthenes [54] to prove that the paſſage of the ſtraits was open, and Artemidorus, to ſhew the extenſion of this commerce to the Southern Horn; of this there will be

[51] The ſphinxes are ſuppoſed to be apes by Weſſeling, and from their tameneſs it is probable. The crocotta I tranſlate hyena, becauſe it is ſaid to be between a wolf and a dog; from the mention of its imitating the human voice, it may be the ſhackall. I cannot help noticing that the animals enumerated by the author are all named in the ſame manner on the celebrated Paleſtrine Moſaick. Hardouin thinks that the diſtinction of theſe ſphinxes from the common ape, was in the face, ſmooth and without hair. Ad Plin. lib. vi. See the Krokotas on the Paleſtrine marble, which I am not naturaliſt ſufficient to appropriate.

[52] So called from Θηρα, becauſe the elephants were here hunted and taken; they are ſo ſtill according to Bruce, and below this cape, de la Rochette places the commencement of a vaſt foreſt, ſeen by all veſſels which keep this coaſt.

[53] 18°. 7′. de la Rochette.

[54] Lib. xvi. p. 769.

frequent

frequent occaſion to ſpeak hereafter, neither ought it to be omitted, that perhaps Agatharchides knew the inclination of the African coaſt beyond the ſtraits, for he notices its curvature [55] to the eaſt, [which terminates at Gardefan,] and which is apparently the boundary of his knowledge in this quarter; but our immediate buſineſs is with the coaſt between Myos Hormus and Ptolemáis, and here the firſt place mentioned is the Sinus Impurus [56], which admits of identification with the Foul Bay of our modern charts, from the circumſtances mentioned by Strabo, who ſays, it is full of ſhoals and breakers, and expoſed to violent winds, and that Berenícè lies in the interior of the bay [57].

Below this, Agatharchides, or his abbreviator, afford little information, for we are carried almoſt at once to two mountains, called the Bulls and Ptolemáis Thêrôn, without any intervening circumſtance but the danger of ſhoals, to which the elephant ſhips from Ptolemáis are expoſed: of theſe ſhoals there are many about Suakem in de la Rochette, though Bruce denies the exiſtence of a ſingle one on the whole weſtern coaſt of the Red Sea. The geographer, however, is more to be depended on than the traveller, as is proved by the misfortunes to which ſome of our Engliſh veſſels have been expoſed, which verify the aſſertions of Eratoſthenes, Artemidorus, and Agatharchides.

At Ptolemáis the account cloſes, as if there were no regular commerce below that point; but its exiſtence has been evinced by what is here ſaid, and will be farther confirmed from the Adulitick

55 I am not certain whether this relates to the coaſt within the gulph or without, but he mentions the iſlands at the ſtraits and the prodigies beyond them.

56 Κολπος ἀκαθαρτος.

57 Ἐν βάθει τοῦ κολπου. Strabo, p. 770.

marble

marble in its proper place; but the total ſilence of Agatharchides, in regard to Berenícè, unleſs it be an omiſſion of his abbreviator, is ſtill more unaccountable; it appears, indeed, as if the caravan road from Coptus to this place, was a much greater object of attention under the Roman government than under the Ptolemies. The accounts extant are all Roman; from Pliny, from the Itinerary, and from the Peutingerian tables; but the Greek authorities may have periſhed, and Strabo mentions two different ſtates of theſe roads; one from Coptus to Berenícè as it was firſt opened by Philadelphus, and another from Coptus to Myos Hormus, after it was furniſhed with wells and reſervoirs, and protected by a guard. Are we then to think that this, after being opened, was neglected again, when Agatharchides wrote? or are we to ſuppoſe that Berenícè is comprehended in the mention of Myos Hormus[58]? for Berenícè is no harbour[59], but an open bay, and the ſhips which lade there, lie at Myos Hormus till their cargo is ready. However this may be, the account of Agatharchides returns again from Ptolemáis to Myos Hormus, and then, after paſſing the gulph of Arsínoè, or Suez, croſſes over to Phenícôn[60] in the Elanitick Gulph, and runs down the coaſt of Arabia to Sabêa. In this courſe of great obſcurity, there is no occaſion at preſent to purſue the tract throughout, as it will be reſumed in the third book, when the account of the Periplûs is to be examined, and ſuch light as is to

[58] It ſhould rather ſeem from this that the road from Coptus to Myos Hormus (which was the neareſt) was more frequented than that to Berenice, and that the latter was never materially in uſe, till the time of the Romans.

[59] Strabo, lib. xvii. p. 815. Βερενίκην αλλὰ μὴν, τῇ δὲ ἰυκαιρίᾳ τῦ Ισθμῦ καταγωγὰς ἐπιτηδείως ἔχυσαι· and infra ἀπὸ δὲ τῆς Βερενίκης ἐπὶ Μυὸς Ὅρμος πόλις ἔχυσα ἰσθμὸν τῶν πλωϊζομένων.

[60] De la Rochette places Phenícôn at Tor, but this will be conſidered hereafter.

be

be collected from other geographers will be adduced, in order to elucidate the narrative, which is the firſt genuine account of Arabia that is extant. Neither is it unworthy of notice, that the Periplûs itſelf is conſtructed upon the plan of Agatharchides; it goes down the weſtern coaſt of the gulph in the ſame manner, then returns back to Myos Hormus, and croſſes over to the eaſtern ſide, and purſues that line to its concluſion; the difference between the two conſiſts in the difference of knowledge in the reſpective ages. Agatharchides deſcribes the trade as it ſtood in the age of Philométor. The Periplûs carries it to the extent it had obtained under the protection of the Roman emperors; but both ſet out from the ſame point for both voyages and it is only the extenſion of the line which conſtitutes the diſtinction.

But it is our immediate buſineſs to proceed to the country of the Sabêans, called Arabia the Happy, from its wealth, its commerce, and its produce, either native or imputed. This province anſwers generally to the modern Yemen, and the Sabêans of our author's age poſſeſſed the key to the Indian commerce, and ſtood as the intermediate agents between Egypt and the Eaſt. This is a moſt valuable fact, which we obtain from this work, and clouded as it may be with much that is dark and marvellous, the truth appears upon the whole inconteſtably. Certain it is that the wealth aſſigned to this nation is a proof of the exiſtence of a commerce, which has enriched all who have ſtood in this ſituation, and equally certain is it that the information of the author ceaſes at the ſucceeding ſtep.

Sabêa, ſays Agatharchides, abounds with every production to make life happy in the extreme, its very air is ſo perfumed with odours, that the natives are obliged to mitigate the fragrance by

ſcents that have an oppoſite tendency, as if nature could not ſupport even pleaſure in the extreme. Myrrh, frankincenſe, balſam, cinnamon, and caſia are here produced from trees of extraordinary magnitude. The king, as he is on the one hand entitled to ſupreme honour, on the other is obliged to ſubmit to confinement in his palace, but the people are robuſt[61], warlike, and able mariners, they ſail in very large veſſels to the country where the odoriferous commodities are produced, they plant colonies there, and import from thence the larimna[62], an odour no where elſe to be found; in fact there is no nation upon earth ſo wealthy as the Gerrhêi and Sabêi, as being in the centre of all the commerce which paſſes[63] between Aſia and Europe. Theſe are the nations which have enriched the Syria[64] of Ptolemy; theſe are the nations that furniſh the moſt profitable agencies to the induſtry of the Phenicians, and a variety of advantages which are incalculable. They poſſeſs themſelves every profuſion of luxury, in articles of plate and ſculpture, in furniture of beds, tripods, and other houſehold embelliſhments, far ſuperior in degree to any thing that is ſeen in Europe. Their expence of

[61] So Bruce, vol. i. p. 408. quotes Iſaiah, xlv. 14. *The merchandiſe of Ethiopia and of the Sabeans, men of ſtature,* are curious, for according with this paſſage, in our author, as with the teſtimony of their mercantile pre-eminence, וסְבָאִים Sebaim. The term for Ethiopia, in this paſſage, is Cuſh, which means ſome tribe of Arabia, and not the Ethiopians of Africa.

[62] Strabo makes Larimnus an odour, ἰνωδέστατον θυμίαμα. xvi. 778.

[63] The fragment of Agatharchides preſerves a moſt valuable record in Photius which is loſt in Diodôrus and Strabo. Strabo ends with the riches of Sabêa, and does not go to the White Sea, and the particulars of the ſun mentioned by Diodôrus and Photius. In the former part Diodôrus is more expanſive and intelligible than Photius.

[64] See Harris, i. 419. Joſephus, lib. viii. c. 2. where mention is made by Harris of Ptolemy's building Philadelphia on the ſite of Rahab of the Ammonites, which might have ſome relation to Syria. But I cannot help ſuppoſing that Συρίαν is here a falſe reading. It ought to be *the kingdom of Ptolemy*, and not *the Syria of Ptolemy*.

living

living rivals the magnificence of princes[65]. Their houſes are decorated with pillars gliſtening with gold and ſilver. Their doors are crowned with vaſes and beſet with jewels; the interior of their houſes correſponds in the beauty of their outward appearance, and all the riches of other countries are here exhibited in a variety of profuſion[66]. Such a nation, and ſo abounding in ſuperfluity, owes its independence to its diſtance from Europe; for their luxurious manners would ſoon render them a prey to the European ſovereigns, who have always troops on foot prepared for any conqueſt, and who, if they could find the means of invaſion, would ſoon reduce the Sabêans to the condition of their agents and factors, whereas they are now obliged to deal with them as principals.

From this narrative, reported almoſt in the words of the author, a variety of conſiderations ariſe, all worthy of attention. It is, as far as I can diſcover, the firſt contemporary account of the commerce opened between Egypt and India, by the medium of Arabia; it proves that in the reign of Ptolemy Philométor, in the year 177, A. C. and 146 years after the death of Alexander, the Greek ſovereigns in Egypt had not yet traded directly to India, but imported the commodities of India from Saba the capital of Yemen; that the port of Berenicè was not uſed for this commerce, but that

[65] Strabo from Eratoſthenes and Artemidorus, confirms all this ſplendour, and almoſt repeats the words of Agatharchides, lib. xvi. p. 778.

[66] Harris, or Dr. Campbell, after talking magnificently of the commerce of the Ptolemies with India, at laſt confeſſes, vol. i. p. 432. that the diſcovery of Hippalus is the firſt certain date of a viſit to that country. It is manifeſt from the whole of this account before us, that the Sabêans did go to India, and that the ſubjects of Ptolemy did not. It is this monopoly that made the riches of Arabia proverbial.—Ieci beatis nunc Arabum invides gazis. Hor. Ode 29. lib. i. where my excellent friend and patron the archbiſhop of York, reads, beatus nunc, which gives a beautiful turn to the whole Ode.

Myos Hormus, or Arsínoè, was ſtill the emporium. It proves that there was no trade down the coaſt of Africa (an intercourſe afterwards of great importance) except for elephants, and *that* no lower than Ptolemáis Thèrôn. It ſhews that the voyage down the Arabian coaſt of the Red Sea was ſtill very obſcure, and above all it demonſtrates inconteſtably by the wealth conſtantly attendant on all who have monopoliſed the Indian commerce, that the monopoly in the author's age was in Sabêa. The Sabêans of Yemen appear connected with the Gerrhêans on the Gulph of Perſia; and both appear connected with the Phenicians by means of the Elanitick Gulph, and with the Greeks in Egypt, by Arsínoè and Myos Hormus.

I am not ignorant that the eſtabliſhment of a trade with India is attributed to Ptolemy Philadelphus[67], that the immenſe revenue and wealth of Egypt is imputed to this cauſe, and that a number of Indian captives are mentioned by Athenêus, as compoſing one part of the ſpectacle and proceſſion, with which he entertained the citizens of Alexandria. But this laſt evidence, which is deemed concluſive, admits of an eaſy ſolution; for Indian was a word of almoſt as extenſive ſignification in that age, as the preſent; it comprehended the Cafres of Africa, as well as the handſome Aſiatick blacks, and the commerce with Arabia was long called the Indian Trade, before the Greeks of Egypt found their way to India. But if real Indians were a part of the proceſſion, they were obtained in Sabêa. The Arabians dealt in ſlaves, and the Greeks

[67] See Harris's Voyages, vol. 1. book i. c. 2. compared with p. 421. This work is quoted as Harris's, but this part of it, in the ſecond edition here referred to, is by Dr. Campbell; and is executed moſt ably. I am obliged to him for many references to authors, which I have it not in my power always to acknowledge.

might

might find Indian ſlaves in their market as well as any other. Huet, Robertſon, and Harris are all very deſirous of finding a trade with India under the Ptolemies; but the two latter, as they approach the real age, when this commerce took place, upon the diſcovery of Hippalus, fully acknowledge, that all proofs of a more early exiſtence of it are wanting; no contemporary author aſſerts it: and the teſtimony of Agatharchides, whether we place him in 177, or with Dodwell, in 104, A. C. affords perfect evidence to the contrary. The internal evidence of the work itſelf carries all the appearance of genuine truth, and copied as it is by Strabo and Diodôrus it obtains additional authority [68]. They have both added particulars, but none which prove a direct communication with India in their own age. They both terminate their information at Sabêa, where he does, and both ſuppreſs one circumſtance of his work which Photius has preſerved, that ſhips from India were met with in the ports of Sabêa. Whatever knowledge of India, or Indian trade, they have beyond this, is ſuch only as they derived from the Macedonians, and is totally diſtinct from the communication between Egypt and that country.

In regard to the influx of wealth into Egypt, it would be equally the ſame, whether the Greeks imported Indian commodities from Arabia or from India direct. For as the Sabêans were poſſeſſed of the monopoly between India and Egypt, ſo Egypt would enjoy the ſame monopoly between Sabêa and Europe.

[68] The authority of Agatharchides is ſo often joined with that of Eratoſthenes by Strabo, that it is highly probable it contains all that Eratoſthenes knew, with the addition of his own information. See Strabo, lib. xvi. p. 778. τἆλλα δὲ, τὰ μὲν παρὰ τοῦ Ἐρατοσθένους λέγει, τὰ δὲ καὶ παρὰ τῶν ἄλλων ἱστορικῶν συνετίθησαν.

The conſumers, indeed, muſt bear the burden of this double monopoly, but the intermediate agents in both inſtances would be gainers, and the profits, while the trade was a monopoly, would be, as they always have been, enormous. The ſovereigns of Egypt were well apprized of this, and ſo jealous were they of this prerogative of their capital, that no goods could paſs through Alexandria either to India or Europe, without the intervening agency of an Alexandrian factor.

In the deſcription which Agatharchides gives of Sabêa there is nothing inconſiſtent with probability; but this is the boundary of his knowledge towards the Eaſt, and the marvellous commences at the ſucceeding ſtep, for he adds, that as ſoon as you are paſt Sabêa, the ſea appears white like a river; that the Fortunate Iſlands ſkirt the coaſt, and that the flocks and herds are all white, and the females without horns[62]. If this has any foundation in truth, the iſlands are thoſe at the mouth of the gulph, if we ought not rather to underſtand the ports of Aden and Cana; and the mention of veſſels arriving here from the Indus, Patala, Perſis, and Karmania is agreeable to the ſyſtem of the commerce in that age. A ſlight notice of the different appearance of the conſtellations next ſucceeds, and then an illuſtrious truth, that in this climate there is no twilight in the morning. Other circumſtances are joined to this, which miſlead; as the riſing of the ſun not like a diſk but a column; and that no ſhadow is caſt till it is an hour above the horizon. A more extraordinary effect is added, that the evening

[62] It is not extraordinary that ſheep ſhould be found without horns, but it is remarkable that they ſhould be regarded as a marvellous occurrence from the time of Homer to that of Agatharchides.

twilight

twilight laſts three hours after ſun-ſet. Theſe circumſtances are introduced to excite the attention of the modern navigator; for notwithſtanding they may be falſe, ſtill there may be certain phênomena that give an origin to the fiction.

If it ſhould now be inquired how the commerce with India could be in this ſtate ſo late as the reign of Ptolemy Philometor, or why the diſcoveries of Nearchus had not in all this time been proſecuted? the anſwer is not difficult. The fleets from Egypt found the commodities of India in Arabia, and the merchants contented themſelves with buying in that market, without entering upon new adventures to an unknown coaſt. There is every reaſon to ſuppoſe that Sabêa had been the centre of this commerce long prior to the diſcoveries of Nearchus, and the age of Alexander; and it is highly probable that the Arabians had even previous[70] to that period ventured acroſs the ocean with the monſoon. That they reached India is certain, for Indian commodities found their way into Egypt, and there is no conveyance of them ſo obvious as by means of Arabia and the Red Sea. The track of Arabian navigators is undoubtedly marked along the coaſt of Gadroſia, before Nearchus ventured to explore it, for the names he found there are many of them Arabick; and if conjecture in ſuch a caſe be allowable, I ſhould ſuppoſe that they kept along the coaſt of Gadroſia to Guadel or Poſſem, and then ſtood out to ſea for the coaſt of Malabar. My reaſon for ſuppoſing this, is, that Nearchus found a pilot at Poſſem, which implies previous

[70] Harris, i. e. Dr. Campbell, Bruce, and Robertſon all ſubſcribe to this opinion, and from this fact a ſtrong degree of probability attaches to the account of Plocamus's freedman, for if he was carried to Ceylon by accident, he would readily find the means of returning by an Arabian veſſel, he would likewiſe learn the nature of the monſoon. See Bruce, vol. i. 369.

navigation,

navigation, and adds, that from that cape to the Gulph of Perſia the coaſt was not ſo obſcure as from the Indus to the cape.

But if Nearchus reported this, or if the commentaries in the Alexandrian library contained any correſpondent information, how could Agatharchides be ignorant of the navigation beyond Sabêa? He was not ignorant of Nearchus's expedition, for he mentions the Ichthyophagi of Gadroſia, with many circumſtances evidently derived from Nearchus, and others added, partly fabulous perhaps, and partly true, from other ſources of intelligence, ſuch as the hiſtories, journals, or commentaries in the library.

He mentions expreſsly the manner of catching fiſh, as deſcribed by Nearchus, within nets extended along the ſhoals upon the coaſt[71], and the habitations of the natives formed from the bones of the whale. He notices the ignorance and brutal manners of the natives, their dreſs, habits, and modes of life; and one circumſtance he records, which he could not have extracted from Nearchus, which is that beyond the ſtraits which ſeparate Arabia from the oppoſite coaſt, (meaning, perhaps, the entrance to the Gulph of Perſia,) there are an infinite number of ſcattered iſlands very ſmall and very low, and extended along the ſea which waſhes India and Gadroſia[72], where the natives have no other means of ſupporting life but by the turtles which are found there in great abundance

[71] He uſes the very word, ἔρκη, ſo often commented on in the journal of Nearchus.

[72] The mention of Gadroſia naturally induces obſcurity and doubt, but the *infinite number* of theſe iſlands can hardly apply to any but the Lackdives or Maldives. The turtle alſo and tortoiſe ſhell is characteriſtick.

and

and of a prodigious ſize. I have thought it neceſſary not to omit this circumſtance, becauſe it appears to me as the firſt notice, however obſcure, of the Lackdives and Maldives[73], called the iſlands of Limyricè in the Periplûs, and diſtinguiſhed particularly as producing the fineſt tortoiſe-ſhell in the world. The mention of them by Agatharchides appears to be the earlieſt intimation of their exiſtence. In that ſenſe the fact is curious, and conſiſtent with the purpoſe of the work, which is at preſent to ſhew the progreſs of diſcovery, as recorded by contemporary authors.

The extravagances or improbabilities which contaminate ſeveral parts of this account in Agatharchides, have been diſregarded by deſign; where knowledge ends fable commences, and much lenity of judgment is due to all writers who ſpeak of diſtant countries for the firſt time, or by report. This author does not diſtinctly mark his Ichthyóphagi. They are not merely thoſe of Gadroſia, but others alſo apparently on the coaſt of Arabia or Africa[74]. Regions, it is true, where fiſh rather than bread has ever been the ſtaff of life, and where it continues ſo at the preſent hour. Let any reader advert to the manner in which he ſpeaks of the paſſage out of the Red Sea into the ocean, and he cannot fail to obſerve, that by giving the African coaſt an eaſterly direction, without notice of its falling down to the ſouth, the commerce of that day had not yet paſſed cape Guardafui.

[73] Χρυσιαντικὴ is by Salmaſius, p. 997. τὰς προκειμένας αὐτῇ τῆς Λιμυρικῆς. Perip. ſuppoſed to relate to the Chryſe of Ptolemy, p. 32.
i. e. Malacca, the Golden Cherſoneſe. But it is coupled with the iſlands of Limyrikè. Χιλών, ἥτις χρυσιαντικὴ καὶ ἡ περὶ τὰς νήσους θηρευομένη,

[74] As are the Icthyophagi of Herodotus, lib. iii. p. 203. ed. Weſſel.

Single

Single ſhips[75], or a few in company, might have doubled that promontory and ſtood to the ſouth, and others of the ſame deſcription might even have reached India. Some obſcure accounts from theſe were poſſibly conveyed to Alexandria, and from that ſource might have been recorded by Agatharchides, but theſe are all very different from his deſcription of Sabêa, and comparatively vague or obſcure. Of the trade to Sabêa he ſpeaks diſtinctly, as a regular eſtabliſhed commerce; ſo far his knowledge was genuine, beyond that it is precarious. This is an opinion collected from a full conſideration of the work itſelf, and to which no one, perhaps, after a ſimilar attention would refuſe to ſubſcribe.

It has been thought of importance to detail theſe particulars from Agatharchides, becauſe he is the genuine ſource from which Diodôrus, Strabo, Pliny[76], Pomponius Mela, and Ptolemy have derived their information. Diodôrus lived in the beginning of the reign of Auguſtus. He has copied the whole of Agatharchides, ſo far as relates to the Ichthyóphagi, Troglodytes, Ethiopians, and Arabians, in his third book. Strabo who lived to the end of Auguſtus's

[75] It is every where apparent, that Ptolemy Philadelphus was more ardent in diſcovery than his ſucceſſors. The Greeks who had been in Abyſſinia, as recorded by Pliny, vi. 35. were all poſſibly ſent by him, as Dalion, Ariſtócreon, Bion, Baſilis, and Simónides; and Timoſthenes his admiral had certainly gone down the coaſt of Africa; for to him Pliny attributes the firſt mention of Cerné or Madagaſcar. But what is here aſſerted is meant only to ſay, that no trade on that coaſt exiſted in conſequence of this diſcovery, as late as Agatharchides; and even in the age of the Periplûs the trade reaches no farther than Rhaptum and Menuthias, Zanguebar, in ſouth lat 6° 0 0″. whereas the north point of Madagaſcar is in lat 12° 0′ 0. Ptolemy alſo only goes to Prafum, lat. 15° 0′ 0″.

[76] Pliny rather accords with Agatharchides than copies him; he ſeems to have gone to the ſource;—thoſe Greeks I mean who entered Ethiopia in the age of Philadelphus. See lib. vi. 35.

reign [77], has followed Agatharchides in regard to the ſame countries, in his ſixteenth book, and has added little to our knowledge of Arabia, but the expedition of Elius Gallus into that country. He has little more expreſs concerning the navigation down the coaſt of Africa, and eaſtward he ſtops at Sabêa with his author. On the coaſt of Gadroſia he has followed Nearchus more faithfully than Agatharchides, but has no mention of the Lackdive Iſlands; and the little he ſays of Taprobana, is a proof that it was known by report, but not yet viſited. Pliny and Pomponius Mela in many detached parts tread the ſame ground, and copy the ſame author.

But if Agatharchides lived under Ptolemy Philomêtor, it is natural to aſk, had nothing been done during 170 years, towards further diſcovery by the fleets that ſailed annually from Egypt? The anſwer is, that whatever was done is not recorded; the courſe of diſcovery was doubtleſs in progreſſion; but there is a great difference between effecting the diſcovery, and bringing it into general knowledge, or making it a part of hiſtory. It is poſſible, alſo, that the ſovereigns of Egypt were more jealous of the trade than ambitious

[77] The Romans do not appear a commercial people, becauſe their great officers and their hiſtorians are too much attached to war, and the acquiſition of power, to notice it. All, therefore, that we hear of commerce is obliquely, but the wealth of merchants was proverbial. (See Horace, lib. iii od. 6. l. 30. See Cicero, who ſays, in contempt indeed, is ſuch a man who was a merchant and neighbour of Scipio, greater than Scipio, becauſe he is richer?) But attend only to the merchants who followed the armies, who fixed in the provinces ſubdued or allied, the Italici generis homines, who were agents, traders, and monopoliſts, ſuch as Jugurtha took in Zama, or the 100,000 that Mithridates ſlaughtered in Aſia Minor, or the merchants killed at Genabum [Orleans], Cæſar Bell. Gall. and you ſee the ſpirit of adventure, and the extent of commerce at a ſingle glance. (See alſo the Letters of Cicero, while proconſul of Cilicia.) Dr. Campbell, in his Political Survey, has proved their conduct on this matter in regard to Britain, and the preſent work will give a moſt extraordinary ſpecimen of it in Egypt.

bitious of the honour; and the later princes were more likely to cramp commerce by extortion, than to favour it by protection. The Phenicians had manifeſtly a ſhare in the profits from its commencement, and it was not unlikely that the Romans might have felt this as an additional incentive for the ſubjugation of Egypt, if they had been fully informed of the means it afforded for adding to the wealth and aggrandiſement of the republic.

It is not meant, therefore, to deny the extenſion of the voyages progreſſively, either to the eaſt or the ſouth; for as long as there was any vigour in the government of Alexandria, the trade on the Red Sea was a favoured object. We learn from Strabo and Diodôrus, a circumſtance not mentioned in Agatharchides, and probably later than his age, that the Nabathêans at the head of the gulph had moleſted the fleet from Egypt by their piracies, and had been ſuppreſſed by a naval force fitted out for that purpoſe. This, at the ſame time it proves the attention of the Egyptian government to this trade, proves likewiſe that the fleets ſtill croſſed the gulph from Myos Hormus or Berenícè, and did not ſtrike down at once to Mûſa or Ócelis, as they did in the age of the Periplûs.

This mark of attention alſo adds highly to the probability, that ſome progreſs had been made to the ſouth, down the coaſt of Africa; for there, from the firſt mention of it, there ſeems always to have been a mart for Indian commodities; and the port of Moſyllon, as appears afterwards by the Periplûs, was a rival to Sabêa or Hadramant. Moſyllon was under the power of the Arabian king of Maphartis, in the ſame manner as the Portugueſe found that nation maſters of the coaſt of Africa, ſifteen centuries later, and the convenience of theſe poſſeſſions to the Arabs is ſelf-evident; for

for as veſſels coming with the monſoon, for the Gulph of Perſia make Maſkat, ſo thoſe bound for Hadramant or Aden run down their longitude to the coaſt of Africa; here, therefore, from the earlieſt period that the monſoons were known to the Arabians, perhaps much prior to Alexander, there would be marts for Indian commodities; and here it is highly probable the fleets from Egypt found them, when the Sabêans were too high in their demands.

That this commerce had taken place ſoon after the time of Agatharchides may be collected from Strabo, who cites Artemidôrus to prove that there was a trade on the coaſt of Africa as low as the Southern Horn. He mentions, indeed, that at the ſtraits of the Red Sea the cargo was transferred from ſhips to boats or rafts, which, though it manifeſts that the navigation was only at its commencement, ſtill proves its exiſtence. He does not name Moſyllon, but the Periplûs, by noticing that ſeveral articles were called Moſyllitick, demonſtrates, that a commerce had been carried on at that port previous to its own age, and that Indian commodities were ſought on that coaſt before they were brought immediately from India. If there were ſuch a mart, this muſt be a neceſſary event, for in the firſt inſtance the trade of Sabêa was a monopoly, and if the ſovereigns of Aden or Maphartis had opened the commerce, either in their own country or Africa, it would draw a reſort thither as ſoon as the port could be known, or the voyage to it be effected. The date of this tranſaction it is impoſſible to aſcertain, but a variety of circumſtances concur to ſhew that it had taken place previous to the diſcovery of the monſoon by Hippalus.

HIPPALUS.

VIII. The diſcovery of Hippalus opens a ſcene entirely new to our contemplation; and if it has appeared that hitherto there are only two ſources of information, the Macedonians and Agatharchides; if it has been ſhewn that all the authors between Agatharchides and the diſcovery, ſpeak the ſame language; it will now be ſtill more evident, that a new era commences at this point, and that the Periplûs, Pliny, and Ptolemy are as uniform in one ſyſtem as their predeceſſors were in another, previous to the diſcovery.

Dodwell has obſerved, with his uſual acuteneſs, that it is no proof that the Periplûs is contemporary with the age of Pliny, becauſe he mentions the ſame ſovereigns, in the different countries of which it treats; for he adds, Ptolemy notices the very ſame, Ceprobotas in Limýricè and Pandíon in Malabar. He ſuppoſes, therefore, that the Periplûs copied Pliny or Pliny's authorities, and that the ſame princes might be reigning from the time of Veſpaſian to the reign of Adrian. But would not this correſpondence of the three be equally conſiſtent, if we ſuppoſe them all to have but one ſource of information? Dodwell would ſubſcribe to this in regard to Pliny and Ptolemy, whoſe age is known, but he refuſes this ſolution to that of the Periplûs, the date of which he chooſes to bring down as low as Verus. Of this more in its proper place.

The truth is, that there are no data for fixing the diſcovery of Hippalus with preciſion. It is certainly ſubſequent to Strabo whoſe

death is placed[78], anno 25. P. C. for Strabo who was in Egypt with Elius Gallus muſt have heard of it, and to all appearance it muſt have been later than the accident, which happened to the freedman of Annius Plocamus, who, while he was collecting the tribute on the coaſt of Arabia, was caught by the monſoon and carried over to the iſland of Ceylon. This happened in the reign of Claudius, under whom Plocamus was farmer of the revenue in the Red Sea. The reign of Claudius commences in the year 41 of our êra, and ends in 54. Let us aſſume the middle of his reign, or the year 47, for this tranſaction, and as Pliny dedicates his work to Titus the ſon of Veſpaſian, if we take the middle of Veſpaſian's reign it coincides with the year 73[79]. This reduces the ſpace for inquiry within the limits of twenty-ſix years. From theſe we may detract the firſt years of Veſpaſian, which were too turbulent for attention to commerce, with the two years of Galba, Otho, and Vitellius; Nero reigned fourteen, and in the early part of his reign, or the ſix laſt of Claudius, the date might be fixed with the greateſt probability, becauſe, if we ſuppoſe the return of the freedman of Plocamus, the embaſſy that accompanied him, or the knowledge he acquired to be a cauſe, or in any degree connected with the diſcovery, this ſpace confined to about ten years is the moſt conſiſtent of all others, to allot to this purpoſe[80]. Another fact connected with this is, the profuſion of Nero in cinnamon and aromaticks,

[78] Blair's Chronology ſays twenty-five years, A. C. which is impoſſible, for Auguſtus ſubdued Egypt, anno 30, A. C. and Strabo muſt have been in Egypt with Gallus in twenty-ſeven, or twenty-ſix, A. C. He could not write his work between that and twenty-five.

[79] Salmaſius ſays, 77. 830 anno urbis conditæ, p. 1186.

[80] Harris fixes Hippalus's diſcovery in the reign of Claudius, vol. i. 431.

at

at the funeral of Poppêa[81]. An extravagance, wanton as it is, which beſpeaks ſomething like a direct importation of the material. And we are likewiſe informed by Pliny, that he ſent two centurions from Egypt up into Ethiopia to obtain a knowledge of the interior; an inquiry naturally attached to the diſcoveries on the coaſt.

The uſual date attributed to the diſcovery of Hippalus is the reign of Claudius. Dodwell and Harris are both of this opinion, and the latter, or rather Dr. Campbell his editor, has treated this ſubject ſo ably, that if it were not neceſſary for the illuſtration of the work before us, it would have been ſufficient to refer to his inquiries, rather than to tread the ground again which he has occupied. Let us aſſume then the ſeventh year of Claudius[82], anſwering to the forty-ſeventh of the Chriſtian êra, for the diſcovery of Hippalus, and the next object of inquiry will naturally be the date of the work which we are to examine.

AGE OF THE AUTHOR OF THE PERIPLÛS.

IX. The learned Dodwell and Salmaſius affix two very different dates to the Periplûs, and between two ſuch able diſputants it is eaſier to chuſe than decide. My own obſervations lead me to prefer the opinion of Salmaſius, but not ſo peremptorily as to

[81] See Pliny, lib. xii. c. 18. the paſſage itſelf is obſcure, it proves that Pliny knew, (what was not known in the prior age,) that cinnamon and caſia were not the native produce of Arabia. But it does not fully prove that the merchants imported them from more diſtant marts.

[82] Dodwell ſays, in primis annis Claudii, and ſuppoſes that Pliny takes his account of Hippalus from a work which Claudius himſelf wrote; certain it is, that the memory of Claudius was revered by the Alexandrians, and not improbably by reaſon of this diſcovery and the proſecution of it.

ſuppoſe

ſuppoſe the queſtion cleared of all its difficulties, and there is a hint dropt by Dodwell, that I ſhould wiſh to adopt, if I were not convinced that the author of the Periplûs really viſited ſeveral of the countries he deſcribes.

Dodwell ſuppoſes that the work was compiled by ſome Alexandrian[83] from the journal of Hippalus; and ſo far it is juſt to allow, that the parallel information in Pliny and the Periplûs does not appear ſo properly to be copied by either from the other, as from ſome authority common to both. But that the author, whatever he copied, was a navigator or a merchant himſelf, cannot be denied, when we find him ſpeaking in the firſt perſon upon ſome occaſions, and when we read his account of the tides in the gulph of Cambay, which is too graphical to come from any pen but that of an eye-witneſs.

This author and Pliny agree in the deſcription of Hadramant[84] and Sabbatha, in the names of the kings and of the ports on the coaſt of Malabar, as Muziris and Cottonara, and of the Sinthus; in the departure of the fleets from Ócelis and Cana, and a variety of other circumſtances; but their moſt remarkable correſpondence is in their hiſtory of the Spikenard and Coſtus[85]; both mention the Ganges

[83] Certe Hippali perſonæ conveniunt examuſſim hujus itinerarii notæ. Nomen ipſum illum Alexandrinum fuiſſe prodit, nec Romanum ſcilicet, nec Ægyptium, ſed planè Græcum, qualia erant colonorum Macedonum Alexandrinorum. Diſſert. p. 102.

[84] Ὑπέρκειται δὲ αὐτῆς μεσόγειος ἡ Μητρόπολις Σαββαθὰ ἐν ᾗ καὶ ὁ βασιλεὺς κατοικεῖ, πᾶς ὁ γινόμενος ἐν τῇ χώρᾳ λίβανος εἰς αὐτὴν ὥσπερ εἰσδοχεῖον εἰσάγεται καμήλοις τε καὶ χιδίαις ἐντοπίαις διεμάτινας ἐξ ἀσκῶν καὶ πλοίοις. Perip. p. 15.

Tus collectum Sabota camelis convehitur portâ ad id unâ patente, digredi viâ capital. Plin. Salmaſ. 492.

[85] Pliny, lib. xii. c. 12. Ed. Hard. De folio Nardi plura dici par eſt ut principale in Unguentis. ...alterum ejus genus apud Gangem naſcens; damnatur in totum, Ozænitidis nomine, virus redolens.—The firſt is the Gangitica of the Periplûs, written alſo Gapanica. The latter

Ganges and Ozênè as the marts for the former, and the Pattalêne for the latter. The intelligence is undoubtedly the ſame in both, and yet there is no abſolute proof that either copied from the other. But thoſe who are acquainted with Pliny's method of abbreviation would much rather conclude, if one muſt be a copyiſt, that his title to this office is the cleareſt. Wherever we can trace him to the authorities he follows, we find that narratives are contracted into a ſingle ſentence, and deſcriptions into an epithet. This appears to me fully aſcertained in the preſent inſtance, but concluſions of this ſort are not haſtily to be adopted.

Pliny periſhed in the eruption of Veſuvius the ſame year that Veſpaſian died, which is the ſeventy-ninth of our êra; and if we place the diſcovery of Hippalus in forty-ſeven, a ſpace of thirty years, is ſufficient for the circumſtances of the voyage, and the trade to be known in Egypt; from whence to Rome the propagation of intelligence is more natural than the reverſe. But if we ſhould be diſpoſed, with Dodwell, to carry the date of the Periplûs down to the reign of Marcus and Lucius Verus[16], that commenced in 161;

latter is from the Ozênè of the Periplûs; which Harduin is ſo far from underſtanding, that he writes Ozænitidis ab ὀζαινω, quod odore fœdo nares feriat. The Coſtus Pliny mentions as obtained at Patala. Primo ſtatim introitu amnis Indi in Patale Inſula, where the Periplûs alſo finds it. See Perip. p. 28, 36. compared with p. 32. If theſe paſſages of the Periplûs had ſtood contiguous, as they do in Pliny, the proof would have been complete; ſcattered as they are, it is nearly ſo.

[16] The paſſage in the Periplûs runs thus: Χαριβαὴλ .... συνεχῶς πρεσβείας καὶ δῶρα φίλα τῶν βασιλέων p. 13, that is, Charibael king of Saphar, is upon friendly terms with the Roman emperors, and receives preſents and embaſſies from them. The word *emperors*, in the plural, induces Dodwell to carry down the date till he meets with two joint emperors reigning together. That a plural does not require this we may learn from Dionyſius Perieg. who ſays of Rome, ἐμὲ μὲν ἀ δῖκοι ἀ ἀστοι, whence Barthius draws a ſimilar concluſion, that Dionyſius lived under the Antonines; but Pliny writes, Dionyſium, quem in orientem prærniſit Divus Auguſtus, lib. vi. 27. a clear proof that Dionyſius lived under Auguſtus. This argument is from Voſſius, Præf. ad Dionyſ. Perieg.

and

and at the diſtance of almoſt a century, its correſpondence with Pliny is by no means equally conſiſtent.

The ſtrength of Dodwell's argument lies in the report of the Periplûs, concerning the deſtruction of Arabia Felix, or Aden[87], by the Romans; and the mention of the coaſt of Africa being ſubject to the ſovereign of Maphartis, king of the *firſt*[88] Arabia. The title of *firſt* or *ſecond* annexed to a province, is a diviſion which certainly ſeems of later date under the emperors, than any period that would ſuit the ſyſtem of Salmaſius; but there is reaſon to ſuſpect the text, or the rendering of it; and no authority which appears ſufficient to prove that the territory of Maphartis ever was a Roman province in any age; or even if it might be ſo called, as being tributary, no reaſon can be given why it ſhould be diſtinguiſhed as the *firſt*.

In regard to the deſtruction of Aden by Ceſar, the author of the Periplûs ſays[89], it happened not long before his time. But what Ceſar this ſhould be is a great difficulty. Dodwell, who ſuppoſes that it muſt be by ſome Ceſar who deſtroyed it in perſon, can find no emperor to whom it can be attributed prior to Trajan. But Trajan never was on the ſouthern coaſt of Arabia; he entered the country from the Gulph of Perſia, but never penetrated to the ſouthern coaſt by land, and never approached it from the Gulph of Arabia. It is much more juſt, therefore, to conclude that Aden[90] was deſtroyed by the command of Ceſar, than by

[87] Page 15. [88] Page 10. [89] Page 15. [90] The proof that Aden is the Arabia Felix of the Periplûs, reſts upon the interpretation of Aden=deliciæ, by Huet, and admitted by d'Anville, from its ſituation, which is certainly correſpondent, or very nearly ſo. It is an unuſual form for a name of a town: but is confirmed by Pomp. Mela, lib. iii. c. 8. Canæ, Arabia et Gandamus.

Ceſar in perſon; and if ſo, any Ceſar whoſe age will coincide with other circumſtances may be aſſumed. Many probabilities conſpire to make us conclude that this was Claudius.

The Romans, from the time they firſt entered Arabia under Elius Gallus, had always maintained a footing on the coaſt of the Red Sea. They had a garriſon at Leuké Komé in Nabathêa[99], where they collected the cuſtoms, and it is apparent that they extended their power down the gulph, and to the ports of the ocean, in the reign of Claudius, as the freedman of Annius Plocamus was in the act of collecting the tribute there, when he was carried out to ſea. If we add to this the diſcovery of Hippalus in the ſame reign, we find a better reaſon for the deſtruction of Aden at this time, than at any other. Aden had been one of the great marts for the Indian commerce, and if Claudius, or the prefect of Egypt, was now diſpoſed to appropriate this trade to the Romans, this was a ſufficient cauſe for ruining Aden, in order to ſuppreſs rivals or interlopers. The jealouſy or oppoſition of Aden to the new diſcovery would naturally afford ground for quarrel, and if not, the Romans knew how to provoke one whenever it ſuited their intereſt.

Theſe conſiderations are offered as a probable anſwer to the weightieſt of Dodwell's arguments; his long and tedious diſquiſition concerning Paleſimundus, will defeat itſelf. It ſtands thus: having determined that the age of the Periplûs muſt be that of Marcus and Lucius Verus, he is obliged to ſuppoſe, that the author could not have ſeen the work of Ptolemy, who lived in the reign of Adrian. Now the reaſons for eſtabliſhing the priority of the

[99] A port north of Jidda and Yambo.

Periplûs

Periplûs are theſe; firſt in going down the coaſt of Africa, the extent of diſcovery is Rhaptum, in latitude 10° 0′ 0″ ſouth; but in Ptolemy a farther progreſs is made to Praſum, in latitude 15° 0′ 0″ ſouth. This naturally appears a proof that Ptolemy is the later writer. But a ſtronger follows; the Periplûs ſtyles Ceylon, Paleſimundu, and adds, "it is the ſame iſland as the ancients called "Taprobana[91]." But in the time of Ptolemy it had acquired a third name, Sálicè, and he accordingly writes, "Sálicè, which was "formerly named Paleſimundus." It follows then, that the author who writes Paleſimundus muſt be prior to the author who writes Sálicè. Dodwell, in order to obviate this ſelf-evident truth, in the true ſpirit of ſyſtem, is neceſſitated to argue, that the author of the Periplûs, though an Alexandrian, had never ſeen the work of Ptolemy, who was of Alexandria alſo; but that he copies Pliny, who was a Roman; and then to ſupport this ſtrange hypotheſis, he is compelled to maintain, that the Paleſimundus of Pliny is not Ceylon, or the Taprobana of the ancients, but the Hippocurà of Ptolemy on the coaſt of Malabar. How theſe aſſertions could be deemed authentic by any one, when Dodwell wrote, is incomprehenſible, unleſs we calculate the dignity which attaches to erudition. But we now know that Sálicè is derived from Sala-bha[92], the Shanſkreet name of Ceylon, and Paleſimundus, from Paraſhri-mandala, the country of Paraſhri[93], or the Indian Bacchus. Both are native names, and voyagers at different times acquired both from the

[91] Page 35.

[92] Paolino, p. 108. Sala is manifeſtly the root of Sálicè, of Selen-dib, or Seren-dive and Ceylon.

[93] Paolino, p. 372. Regi, cultum Liberi Patris. The king, ſays Pliny, worſhips Bachus.

natives. When the iſland of Ceylon comes under conſideration in the courſe of the narrative, more will be ſaid on this ſubject, at preſent this is ample proof, that the merchants in the age of the author called Ceylon Paleſimundus, and that in Ptolemy's age it was ſtyled Sálicè; if Ptolemy then allows the former to be firſt in uſe, the Periplûs muſt of neceſſity be prior to his publication.

Dodwell ſays [94], that none of Ptolemy's aſtronomical obſervations are earlier than the ninth year of Adrian, anſwering to 123, A. D. If then the firſt year of Marcus and Lucius Verus is 161, A. D. We add nearly forty years to the antiquity of the Periplûs at one ſtep, it could not be later than 123, and how much earlier muſt be the next object of our inquiry. On this head probability and conjecture muſt ſupply the place of proof. The author ſpeaks of the diſcovery of Hippalus, without ſpecifying its date, or its diſtance from his own time. Some conſiderable interval is manifeſt from his expreſſion, when he ſays, "from the time of "Hippalus to this day ſome ſail ſtraight from Kanè, &c.[95]" but what ſpace to allot to this interval is by no means evident. From the ſeventh of Claudius, the aſſumed epoch of the diſcovery, to the ninth of Adrian [96], is ſeventy-eight years, a ſpace in which we may fix the publication of the Periplûs, ſo as beſt to ſuit with other circumſtances, and there is one reaſon to fix it conſiderably previous to Ptolemy [97], which is this; Ptolemy profeſſes to derive his

[94] Diſſert. p. 89.

[95] Page 32.

[96] Ptolemy, publiſhed much later, for he lived till 161 at leaſt, near forty years after the 9th of Adrian.

[97] Salmaſius writes, hinc liquet auctorem eſſe vetuſtiſſimum & longe Ptolemæo anteriorem, at the concluſion of his argument on the temple of Auguſtus, in Limyricè. Plin. Ex. p. 1186.

information

information from the merchants of Egypt, and the Periplûs ſeems to be the very work he would have conſulted; if he had known it, and yet one circumſtance is ſufficient to prove, that it never came under his contemplation. His error of extending the coaſt of Malabar weſt and eaſt, inſtead of north and ſouth, is notorious; this he could not have done if he had conſulted the Periplûs, for there it is laid down in its proper direction. This induces a belief, that it was not publiſhed in, or near the age of Ptolemy, but ſo much prior as to be neglected, or from its compaſs and contents not to have obtained much notice at the time of its publication. It is not eaſy to account for Ptolemy's diſregard of it on any other ground, unleſs he knowingly ſlighted it, and preferred the accounts of later voyagers.

But in order to ſee the ſtate of things ſuitable to the internal evidence of the Periplûs, we muſt take a view of the Roman government in Egypt. Egypt became a Roman province in the year thirty before our era, and from the moment it was ſubdued, Auguſtus planned the extenſion of the Roman power into Arabia and Ethiopia, ſuppoſing that Arabia produced ſpices, and Ethiopia, gold, becauſe theſe were the articles brought out of thoſe countries into Egypt. The avidity with which this plan was adopted may be conceived by obſerving that, within ten years after the reduction of Egypt, Gallus had penetrated into the heart of Arabia, and Petronius had advanced eight hundred and ſeventy miles above Syênè into Ethiopia, and reduced Candácè the queen of that country to the condition of a tributary.

The expedition of Petronius is fixed to a certainty in 21, A. C. becauſe the embaſſadors of Candácè found Auguſtus at Samos,

Samos, where he was that year; and that of Gallus[99] was contemporary, becauſe his abſence with a part of the troops of the province was the inducement for Candácè to inſult the government. And it muſt have been but a very few years after this, that Strabo went up to Syénè with Elius Gallus[100], who was then become prefect. Upon this occaſion he obſerves, that he was informed an hundred and twenty ſhips now ſailed from Myos Hormus annually for India, whereas, under the Ptolemies, a very few only had dared to undertake that voyage[101].

The embaſſies from Porus and Pandion to Auguſtus, mentioned with ſo much oſtentation by the hiſtorians, afford conſiderable proof of the progreſs of Roman diſcovery in the eaſt; and the veſſels which conveyed theſe embaſſadors from the coaſt of Malabar muſt have landed them either in Arabia, or in the Gulph of Perſia, or the Red Sea; the conveyance alſo of the freedman of Plocamus back again from Ceylon to Egypt, proves that the voyage was performed previous to the diſcovery of Hippalus. Agreeably, therefore, to the aſſertion in the Periplûs we ought to ſuppoſe that none of theſe conveyances were performed by means of the monſoon, unleſs we ſhould allow the veſſels to be Indian or Arabian, for both theſe nations appear viſibly to have known the nature of theſe winds long before the Romans were acquainted with them. From theſe circumſtances we may collect the extreme deſire of Auguſtus to extend his knowledge and his power towards the eaſt, and though the inert reign of Tiberius, or the wild tyranny of Caligula, furniſh no documents of a further progreſs,

[99] Strabo, lib. xvii. p. 819.
[100] Strabo, lib. ii. p. 118.
[101] Ὀλίγων παν τάπασι. Ibid.

we

we may conclude, that the prefects of Egypt were ſtill intent on promoting a diſcovery once commenced, and with which the emoluments of their own government were ſo immediately connected. We muſt ſuppoſe, that the Roman fleet was ſuperior *in the* Red Sea and on the ſouthern coaſt of Arabia, before any of the powers on that coaſt could become tributary, and tributary they indubitably were before the reign of Claudius, or Plocamus could not have been farmer of the revenue.

When the freedman of Plocamus returned from Ceylon, if he came in a Roman veſſel he muſt have coaſted his whole voyage; but as the king of Ceylon ſent four embaſſadors with him to Claudius, and a rajah [102] to take charge of the whole, we muſt conclude that they came in an Indian veſſel to Arabia, and that the freedman learned the nature of the monſoon in the courſe of his navigation; this is ſo near in point of time, that we cannot be miſtaken in ſuppoſing it, connected with the attempt of Hippalus, and in conſequence of it, the revolution in the whole courſe of Oriental commerce.

The advantage which Claudius made of this diſcovery, and the proſecution of it ſo beneficial to Egypt, rendered his name dear to the Alexandrians; his writings were rehearſed in their muſeum, and the account he gave of this commerce is juſtly believed by Dodwell to be the ſource of Pliny's information [103].

It is this circumſtance which above all others induces me to fix the deſtruction of Aden under Claudius, or at lateſt under Nero, whoſe

[102] Principe eorum Rachiâ, Pliny. I have no heſitation in ſubſcribing to the opinion of Paolino, that Rachia is Rajah.

[103] Dodwell, Diſſert. p. 93. from Suetonius Claud. c. 42. But this was not their own act, it was by order of Claudius.

mind was equally fixed on Ethiopia, Arabia, and India, as the fountains of all the treaſures of the eaſt. The more important every ſtep grew in purſuing this commerce to the ſource, the greater temptation there was to ſuppreſs every power which could come in competition. One thing is evident, Aden was not deſtroyed by any Ceſar in perſon; for we cannot find in all hiſtory a Ceſar that ever viſited the ſouthern coaſt of Arabia. If it was by the command of Ceſar, it ſuits no one ſo well as Claudius or Nero, or if they are too early, there is no other but the reign of Adrian to which it can be attributed. Adrian was in Egypt himſelf; his ſyſtem was all directed to regulation and improvement of the provinces; this might be a part of his plan. But there is nothing in the Periplûs itſelf to make us adopt this period and much to contradict it.

It has been neceſſary to inveſtigate this fact with accuracy, becauſe the date of the work depends upon it; for at whatever point we fix the deſtruction of Aden, very near to that we muſt fix the Periplûs; as the author intimates that it was not long before the period in which he writes. It is not ſatisfactory to leave this queſtion reſting upon probabilities only. But where hiſtory is ſilent, probability is our only guide, and correſpondent circumſtances are the beſt foundation of probability.

From theſe premiſes the reign of Nero appears moſt accordant to the internal evidence of the work itſelf, or if the reign of Adrian ſhould be preferred, it muſt be the year he was in Egypt, which is the tenth of his reign, and anſwers to the year 126, A. D. The objection to this is its coincidence with the age of Ptolemy, which for the reaſons already ſpecified can hardly be reconciled

reconciled to conſiſtence. I aſſume, therefore, the reign of Claudius for the diſcovery of Hippalus, and the tenth year of Nero for the date of the Periplûs, leaving the queſtion ſtill open for the inveſtigation of thoſe who have better opportunities for deciding upon its preciſion.

INTERCOURSE WITH INDIA ANTECEDENT TO HISTORY.

X. In entering upon this ſubject two conſiderations preſent themſelves to our view, which muſt be kept perfectly ſeparate and diſtinct: the firſt is, that the intercourſe itſelf is hiſtorical; the ſecond, that the means of intercourſe can only be collected from circumſtances: the former admits of proof; the latter is at beſt hypothetical. I can prove that ſpices were brought into Egypt, (which implies their introduction into all the countries on the Mediterranean,) and I argue from analogy, that Thebes and Memphis in their reſpective ages were the centre of this intercourſe, as Alexandria was afterwards, and as Cairo is, in ſome degree, even at the preſent hour.

That ſome Oriental ſpices came into Egypt has been frequently aſſerted, from the nature of the aromatics which were employed in embalming the mummies[104]; and in the thirtieth chapter of Exodus we find an enumeration of cinnamon, caſſia, myrrh, frankincenſe, ſtactè, onycha, and galbanum, which are all the produce either of India or Arabia. Moſes ſpeaks of theſe as precious, and appropriate to religious uſes; but at the ſame time in ſuch

[104] Mummia, or Mumia, was once a medicine, certainly not on account of the cadaverous but the aromatic ſubſtance.

quantities [105], as to ſhew they were neither very rare, or very difficult to be obtained. Now it happens that cinnamon and caſſia are two ſpecies of the ſame ſpice [106], and that ſpice is not to be found nearer Egypt or Paleſtine, than Ceylon [106], or the coaſt of Malabar. If then they were found in Egypt, they muſt have been imported; there muſt have been intermediate carriers, and a communication of ſome kind or other, even in that age, muſt have been open between India and Egypt. That the Egyptians themſelves might be ignorant of this, is poſſible; for that the Greeks and Romans, as late as the time of Auguſtus [107], thought cinnamon the produce of Arabia, is manifeſt from their writings. But it has been proved from Agatharchides, that the merchants of Sabêa traded to India, and that at the time when Egypt poſſeſſed the monopoly of this trade in regard to Europe [108], the Sabèans enjoyed a ſimilar advantage in regard to Egypt. Of theſe circumſtances Europe was ignorant, or only imperfectly informed; and if ſuch was the caſe in ſo late a period as 200 years before the Chriſtian êra, the ſame circumſtances may be ſuppoſed in any given age where it may be neceſſary to place them.

There are but two poſſible means of conveying the commodities of India to the weſt, one by land through Perſia or the provinces on the north, the other by ſea; and if by ſea, Arabia muſt in all

[105] Five hundred ſhekels of myrrh, five hundred of caſſia, two hundred and fifty of cinnamon.

[106] See article Kaſſia Kaſia in the liſt of articles of commerce.

[107] See Strabo, lib. xvi. paſſim.

[108] Καὶ γὰρ δὴ καὶ μονοπολίας ἔχει. Μία γὰρ ἡ Αλεξάνδρεια τῶν τοιούτων ἐπὶ τὸ πολὺ καὶ ἐποδοχῶν ἐστὶ, καὶ χορηγὸς τοῖς ἐκτός. Alexandria has the whole monopoly to herſelf. She is the receptacle of all [Indian] goods, and the diſpenſer of them to all other nations. Strabo, lib. xvii. p. 798.

ages

ages have been the medium through which this commerce paſſed, whether the Arabians went to Malabar itſelf, or obtained theſe articles in Carmania, or at the mouths of the Indus.

In order to ſet this in its proper light, it is neceſſary to ſuppoſe, that the ſpices in the moſt ſouthern provinces of India were known in the moſt northern, and if from the north, they might paſs by land; from the ſouth, they would certainly paſs by ſea, if the ſea were navigated. But in no age were the Perſians[109], Indians, or Egyptians, navigators; and if we exclude theſe, we have no other choice but to fix upon the Arabians, as the only nation which could furniſh mariners, carriers, or merchants in the Indian ocean.

But let us trace the communication by land on the north: it is only in this one inſtance that I ſhall touch upon it; and that only becauſe it relates to an account prior to Moſes. Semiramis[110] is ſaid to have erected a column, on which the immenſity of her conqueſts was deſcribed, as extending from Ninus or Ninivè, to the Itámenes, (Jómanes or Jumna,) eaſtward; and ſouthward, to the country which produced myrrh and frankincenſe; that is, eaſtward to the interior of India, and ſouthward to Arabia. Now, fabulous as this pillar may be, and fabulous as the whole hiſtory of Semiramis may be, there is ſtill a degree of conſiſtency in the fable; for the tradition is general, that the Aſſyrians of Ninivè did make

[109] It is not meant to aſſert that theſe nations never uſed the ſea; they certainly did, upon their own coaſts, but there are not now, nor does hiſtory prove that there ever were, any navigators, properly ſo called, in the eaſtern ſeas, except the Arabians, Malays, and Chineſe. The Chineſe probably never paſſed the ſtraits of Malacca, the Malays ſeem in all ages to have traded with India, and probably with the coaſt of Africa.

[110] Bochart, tom. i. p. 109. from Diodôrus.

an irruption into India; and the return of Semiramis[111] through Gadrosia, by the route which Alexander afterwards pursued, is noticed by all the historians of the Macedonian. If, therefore, there is any truth concealed under this history of Semiramis, the field is open for conceiving a constant intercourse established between India and the Assyrian empire, and a ready communication between that empire and the countries bordering on the Mediterranean. This intercourse would account for the introduction of the gums, drugs, and spices of India into Egypt, as early as the 21st. century before the Christian era[112], and 476 years antecedent to the age of Moses.

But this is not the leading character in the accounts left us by the Greek historians[113]; they all tend to Phenicia and Arabia. The Arabians have a sea coast round three sides of their vast peninsula; they had no prejudices against navigation either from habit or religion. There is no history which treats of them, which does not notice them as pirates or merchants by sea, as robbers or traders by land. We scarcely touch upon them accidentally in any

[111] When two fables of two different countries agree, there is always reason to suppose that they are founded on truth: the Mahabhárat is perhaps as fabulous as the history of Semiramis; but this work (in Col. Dow's account of it,) specifies, upon a variety of occasions, the great attention of the Indian sovereigns to pay their tribute to their western conquerors. I cannot trace this to its causes or consequences, but it always seems to justify the idea, that there had been some conquest of India, by the nations which inhabited those provinces which afterwards composed the Persian empire. It is this conquest in which the Grecian accounts of Semiramis and the Mahabhárat agree.

[112] Semiramis, A. C. 2007. Moses in Midian 1531. Blair.

[113] Herôdotus, lib. iii. p. 250. reckons up frankincense, myrrh, cassia, cinnamon, ladanum, (a gum,) and storax as the produce of Arabia: these commodities were brought into Greece by the Phenicians. See also p. 252.

author,

author, without finding that they were the carriers of the Indian ocean.

Sabêa[114], Hadramant, and Oman were the reſidence of navigators in all ages, from the time that hiſtory begins to ſpeak of them; and there is every reaſon to imagine that they were equally ſo, before the hiſtorians acquired a knowledge of them, as they have ſince continued down to the preſent age.

It is ſurely not too much to admit that a nation with theſe diſpoſitions, in the very earlieſt ages croſſed the Gulph of Perſia from Oman to Carmania: the tranſit in ſome places is not forty miles; the oppoſite coaſt is viſible from their own ſhore[115]; and if you once land them in Carmania, you open a paſſage to the Indus, and to the weſtern coaſt of India, as a concluſion which follows of courſe.

I grant that this is wholly hypothetical; but where hiſtory ſtops, this is all that rational inquiry can demand. The firſt hiſtory to be depended on, is that of Agatharchides. He found Sabêa, or Yemen, in poſſeſſion of all the ſplendour that a monopoly of the Indian trade muſt ever produce, and either here or at Hadramant or Oman it muſt ever have been: theſe provinces all lie within the region of the monſoons, and there is every reaſon to imagine that they had availed themſelves of theſe in the earlieſt ages, as well as in the lateſt. I conclude that their knowledge in this reſpect is prior to the building of Thebes; and that if the monopoly on the

[114] Hadramant is the Atromitis of the Greeks; it is nearly centrical between Sabêa and Oman on the ocean. Oman is the eaſtern part of Arabia, towards the Gulph of Perſia. Sabêa is Yemen, on the Red Sea, but extends, or did anciently extend, to the ports on the ocean, as Aden, &c.

[115] Strabo, lib. xvi. p. 769 et. ſec. 99.

eaſtern ſide of the Red Sea was in their hands, that on the weſtern ſide was fixed at Thebes. The ſplendour of that city, ſtill viſible in its very ruins, is in no other way to be accounted for: it is exactly parallel to the caſe of Alexandria in a later period; for Alexandria did not trade to India, the monopoly was ſtill in Sabêa when Agatharchides wrote, and the monopoly at Alexandria was as perfect in regard to the Mediterranean, as that of Sabêa was in regard to the Indian ocean. The wealth of the Ptolemies was as pre-eminent as that of the Thebaick Dynaſties, and the power and conqueſts of a Philadelphus or Euergetes [116] leſs fabulous than thoſe of Seſonchoſis.

That the Grecian Dynaſty in Egypt tried every experiment to evade the monopoly at Sabêa, is manifeſt from hiſtory. The ſtraits [117] of the Red Sea were paſſed, the ports of Arabia on the ocean were explored, the marts on the coaſts of Africa were viſited, Indian commodities were found in all of them. A proof direct, that the monſoon was at that time known to the Arabians [118], though hiſtory knew nothing of it till the diſcovery of Hippalus; that is, till 200 years later: this is the more extraordinary, as the fact had been aſcertained in part by the voyage of Nearchus, and as all its conſequences would have been explored, if Alexander had lived another year. I always wiſh to be underſtood as never aſſerting

[116] Euergetes ſays, in the Adulitick Inſcription, he had reduced the *whole* world to peace. Seſonchoſis could do no more.

[117] Strabo lib. xvi. p. 773.

[118] I had expected to find an account of the monſoons in the Oriental writers; but as my acquaintance with them by tranſlations only, muſt be very confined, I have met with only one inſtance, and that in a very different region. Ventus marinus ſex integris menſibus regnat in illo, [mari tenebroſo,] et tum in alium ventum convertitur. Al. Edniſſi, p. 34. the *Mare Tenebroſum* is at leaſt eaſt of Malacca, if not of China.

that

that the voyage between Egypt and India was utterly unpractiſed by the Greeks; the evidence is clear, that ſome few veſſels performed it, but they coaſted the whole way [119]: the greateſt number is that mentioned by Strabo of an hundred and twenty ſhips. The expence of ſuch a navigation did not anſwer; it was found cheaper to purchaſe Indian goods in the old markets: the paſſage by the monſoon was never attempted; and the ſolitary fact of all hiſtory, which I can diſcover, previous to Hippalus, is that in the fabulous account of Iambûlus. I believe that fact, not as performed by Iambûlus, but as an evidence that ſome ſuch paſſage had been heard of, that an obſcure notion prevailed that it was made from the coaſt of Africa, and that, therefore, it was interwoven with the piece to give the fable an appearance of reality. I believe it to have had its riſe from Arabia; and it is one proof among others, that the Arabians did reach India prior to hiſtory, and a ſufficient reaſon why the Greeks found it cheaper to purchaſe their cargoes in the Arabian markets, rather than to go to India themſelves. A truth certainly, if the Arabians ſailed with the monſoon, and the Greeks coaſted the whole voyage.

Theſe conſiderations taken in the maſs, induce a belief that in the very earlieſt ages, even prior to Moſes, the communication with India was open, that the intercourſe with that continent was in the hands of the Arabians, that Thebes had owed its ſplendour

[119] Περιπλοῦς. Periplûs. Strabo does certainly fully mean to ſay, that a conſiderable fleet went to India, but not till the Romans were maſters of Egypt; and whether they performed the whole voyage, or only to Arabia for Indian commodities, is a queſtion. If we ſuppoſe them to reach the mouths of the Indus, it is the full extent that can be required; for Pliny expreſsly ſays, that the ports on the coaſt of Malabar were only beginning to be known in his age. In what way they failed previous to the Periplûs will be noticed in its proper place.

to

to that commerce, and that Memphis roſe from the ſame cauſe to the ſame pre-eminence. Cairo ſucceeded to both in wealth, grandeur, and magnificence; all which it muſt have maintained to the preſent hour, if the diſcoveries of the Portugueſe had not changed the commerce of the world; and which it does in ſome proportion ſtill maintain, as a centre between the eaſt and the Mediterranean. The eſſential difference between theſe three capitals and Alexandria, proves paſt contradiction, the different ſpirit and ſuperior ſyſtem of the Greeks. Theſe three capitals were inland for the ſake of ſecurity: a proof that the natives never were navigators or ſovereigns of the ſea. The Greeks were both; and the capital of the Ptolemies was therefore Alexandria. Their fleets were ſuperior to all that had ever appeared on the Mediterranean; and the power of their kingdom ſuch, that nothing but a ſucceſſion of weak and wicked princes could have deſtroyed it. While Egypt was under the power of its native ſovereigns, Tyre, Sidon, Aradus, Cyprus, Greece, Sicily, and Carthage were all enriched by the trade carried on in its ports, and the articles of commerce which could be obtained there and there only; the Egyptians themſelves were hardly known in the Mediterranean as the exporters of their own commodities; they were the Chineſe of the ancient world, and the ſhips of all nations, except their own, laded in their harbours.

The ſyſtem of the Ptolemies was exactly the reverſe. Alexandria grew up to be the firſt mart of the world, and the Greeks of Egypt were the carriers of the Mediterranean, as well as the agents, factors, and importers of Oriental produce. The cities which had riſen under the former ſyſtem, ſunk ſilently into inſignificance; and

ſo

ſo wiſe was the new policy, and ſo deep had it taken root, that the Romans, upon the ſubjection of Egypt, found it more expedient to leave Alexandria in poſſeſſion of its privileges, than to alter the courſe of trade, or occupy it themſelves. Egypt, in ſtrict propriety, was never a Roman province, but a prefecture, governed, not by the ſenate but the emperor himſelf. No pretor or proconſul ever had the command; no man above the equeſtrian order was ever prefect; no Roman [120] ever entered the country without the expreſs licence of the emperor. Theſe circumſtances are particularized to ſhew the wiſdom of the Greeks in their eſtabliſhment of the ſyſtem, and the wiſdom of the Romans in contenting themſelves with the revenue, rather than the property of the country [121]. This revenue, amounting to more than three millions ſterling, they enjoyed for more than ſix hundred years [122]; and till the moment of the Arabian conqueſt, Alexandria continued the ſecond city of the empire in rank, and the firſt, perhaps, in wealth, commerce, and proſperity.

Theſe conſiderations are by no means foreign to our purpoſe: it is the deſign of this work to exhibit the trade with India under

[120] One charge brought againſt Germanicus by Tiberius, was his going into Egypt without permiſſion.

[121] It does not appear that any Roman in Egypt was allowed to engage in commerce. In the early part of their government at leaſt, all the names we meet with in the trade of the Red Sea, Africa, and India, are Greek: Arrian, Dionyſius, &c. &c.

[122] It is the ſtability of the Roman conqueſts which diſtinguiſhes them from thoſe of other nations. If we place the meridian power of Rome in the age of Auguſtus, it was 700 years in riſing, and 1400 years in falling. The ſovereignty of Egypt, for 600 years, is of greater duration than that of any native or foreign dynaſty not mythological; and this ſovereignty, notwithſtanding particular intervals of tyranny, does ſeem upon the whole to have been exerciſed for the good of the people, which is the end of all government. When Egypt fell, its proſperity, though impaired, was probably ſuperior to that of any other province of the empire. The revenue I take at a medium from the calculation of Strabo, who ſays, that under Auletes, the worſt of the Ptolemies, it was 2,421,875 l.; but he adds, that the Romans managed it to much greater advantage, and even doubled it. Strab. lib. xvii. p. 798.

every point of view in which it was regarded by the ancients; but if it were not my determination to close my researches with the voyage of Gama, I could now shew how a contrary policy has brought the richest country in the world to its present state of misery. Policy, I say, because, though the discovery of Gama must have injured Egypt, it could not have reduced it to desolation. It is the conquest of Selim, and a divided power between the Porte and the Mameluks, which has sunk a revenue of three millions to a cypher [123]; a policy, in fact, which has cut down the tree to come at the fruit, which is not content with the golden egg, but has killed the bird that laid it [124].

[123] There is a tribute paid by the Mameluks to the Pacha of Egypt, but it never reaches Constantinople, as there are always charges to set off against it.

[124] Exception, perhaps, may be taken to what has been said in regard to the Egyptians never appearing in the Mediterranean as a naval power. The expression is meant to apply to that country only while under its native sovereigns. As subject to the Persians, Macedonians, and Romans it furnished large fleets. This restriction, omitted in its proper place, the vacancy of the present page allows me to insert.

The names of places will be diſtinguiſhed by capitals in the margin; in which form the Greek ſound and Greek orthography will both be preſerved. The Latin or modern orthography will be followed in the text, to avoid the appearance of ſingularity.

Marks of tones.

' The accent, as Azánia.

` The note when e final is pronounced long or ſhort, as Calpè.

^ The note of a long vowel or diphthong in the Greek, as Opônè, Nêſſa, Niloptolemèon, Kuenîon.

To front p 69 Book II

CHART of the RED SEA

Copied by Mr Dalrymple's permission from the CHART by Robt White 1795

NB the line of Coast alone is taken from Mr Dalrymple's Chart. the names of places, and all other parts of the work, are from different authorities, and accommodated to the PERIPLUS.

Names of the Periplus in Roman letters
Modern names in Italicks
Places supposed to be ascertained have an Asterisk.

Part of Necropolis
MEDITERRANEAN SEA
ALEXANDRIA
Canal
Canopick Branch
Gaza
Pelusium
ARSINOE
Suez
Cairo
Memphas
Mt Addeyra
Point Moses
Foul Point
Mt Abu Darabia
Ras Mesalle
Hummum Point
Pharoahs Mount
Zafarana
Pass Mountains so called by Periplus
Cape Jehan
Toor
Mount Agrib
Aila
PHÆNICON of Ptolemy
PHÆNICON of Strabo
Shaur
Ebah
Sandy I.
Ras Selah
Sandy Is.
Brothers
Naaman I.
Hugh Rugged Land
Myos Hormus
Safagien Isl.
Old Cosire
Myos Hormus of some Charts
Cosire
KAINE
Ghienne
old road to Myos Hormus
COPTUS
Pharaonum
Didyme
Aphrodites
Compasi
Hydreum Jovis
Arisemis
Phylacon
Hydreum Apollinis
Cabalasi
Caravan road from Coptus to Berenice
Tuna
Hamra
Emerald I. of Bruce
Emerald I.
Cape Nose
Kainon Hydreum
SYENE according to Bruce
SYENE
BERENICE
Foul Bay
SINUS IMMUNDUS
Meher
Reghab
Yambo
Bender Rabagh
Haram
Ras el Gidul
Ras Haleba
River Fartak
River Charles
Cape Calmez
Judda
Magarzan
Ras el Abn
Cape Ibrahim
Ras el Askar
Sergue
Two Sisters
Marmbar Shoal
Camrida
Ras Ahahax
Hali
Sabea
Merlet Isl.
S.W. Islet
Ptolemais Theron of Bruce
Ptolemais Theron according to the Lat. of Meroe
Fortet Fawal of Lephanes
Nubian Coast of Zoskales
Arkoko
Dalak I.
Gebel Tor
Reab
Cape Israel
Sabogir Is.
Gebel Zebayr
Bay where the Opsian Stone is found according to Periplus but
Hodeida
Gebel Zeker Volcano perhaps the burnt Island of the Periplus
Baibul
Mocha
Asrab Taba
Perim
Kanon
Ras Ghezan
Gidan
NILE
Astaboras
KURGOS
MEROE
ARABIA
HEDJAZ
HABESH
YEMEN

THE

PERIPLUS

OF THE

ERYTHREAN SEA.

BOOK II.

Introduction. — I. *Myos Hormus.* — II. *Berenicè.* — III. *Inland Navigation to Coptus.* — IV. *Ptolemáis Therôn.* — V. *Adúli, Abyssinia.* — VI. *Dîræ, Straits of Bab-el-Mandeb.* — VII. *Abalítès.* — VIII. *Maláo.* — IX. *Mûndû.* — X. *Mosyllon.* — XI. *Niloptolemêon.* — XII. *Marts, Tapatégè, Daphnôna Micron, Elephas Prom. Rivers, Elephas, Daphnôna Megan, or Acannai.* — XIII. *Tabai.* — XIV. *Opônè.* — XV. *Apócopa.* — XVI. *Little Coast, Great Coast.* — XVII. *Serápiôn, Nicôn, Seven Rivers.* — XVIII. *The New Canal or Mombaça.* — XIX. *Rhapta, or Quiloa.* — XX. *Menûthésias, or Zanguebar Islands.* — XXI. *Prasum of Ptolemy.* — XXII. *Menûthias of Ptolemy.* — XXIII. *Limit of Ancient Discovery.* — XXIV. *Heródotus.* — XXV. *Ptolemy.* — XXVI. *Discoveries of the Portugueſe, Covilham, Marco Polo.* — XXVII. *Voyages of Diaz and Gama.* — XXVIII. *Arabian Settlers Ancient and Modern on the Coast of Zanguebar.*

" Orientalem oram Africæ ſulcavit Auctor Peripli, cujus auctoritas majoris eſt
" facienda quàm cæterorum omnium, utpote qui ſolus veritati conſentanea
" ſcripſerit." Vossius ad Melam. p. 595. ed. Varior. Lugd. 1722.

THE object propoſed for conſideration in the ſecond book is the navigation of the ancients from Myos Hormus in the Gulph of Arabia, to the Promontory of Rhaptum[1] on the coaſt of Africa. Myos Hormus lies in the twenty-ſeventh degree of northern latitude, and Rhaptum will be fixed near ten degrees to the ſouthward of the equator; conſequently we have a ſpace of above two thouſand five hundred miles to examine, involved in ſuch obſcurity, that without recourſe to modern diſcovery, the navigation of the ancients is inexplicable.

The Periplûs, which has been aſſumed as the baſis of our diſquiſition, has a claim to this preference, not only as the moſt ancient but the moſt ſpecific account extant; for notwithſtanding particular places may have been noticed in treatiſes of a prior date, the line of coaſt which it embraces is to be found no where previouſly in detail; and the circumſtances which it particularizes bear ſuch a ſtamp of veracity, as to aſſure us, that if the voyage was not performed by the writer, it is at leaſt delineated from authentic documents.

[1] Ptolemy writes both Rhapta and Rhaptum, the Periplûs always Rhapta, plural.

I. The

I. The ſurvey commences from Myos Hormus[2], a port choſen by Ptolemy Philadelphus for the convenience of commerce, in preference to Arsínoè or Suez, on account of the difficulty of navigating the weſtern extremity of the gulph. Myos Hormos.

The name of this port ſhews its origin to be Greek: it ſignifies the harbour of the Mouſe; an appellation which it afterwards changed for the harbour of Venus. But the former is the more prevalent, and the latter is recorded by Agatharchides only and his copyiſts. Its ſituation is determined by three iſlands, which Agatharchides mentions; known to modern navigators by the name of the Jaffateens, and its latitude[3] is fixed with little fluctuation in 27° 0′ 0″, by d'Anville, Bruce, and de la Rochette. The preſumption in favour of de la Rochette's accuracy is natural, as he had the charts and journals of ſeveral Engliſh navigators before him, and the poſition of the iſlands[4] with the indenture of the coaſt, is ſuch as would ſufficiently correſpond with what the ancients called a port. Strabo deſcribes the entrance as oblique[5], which was perhaps effected by the ſite of the iſland at the entrance; and he notices that the ſhips which ſailed from Berenícè lay at this port till their cargoes were prepared.

II. The ſame reaſon which induced Philadelphus to form the port of Myos Hormus, led him afterwards to the eſtabliſhment of Berenícè, Berenike.

[2] De la Rochette has made two ports of the Myos Hormus and Aphrodites Hormus of Strabo, but they are both the ſame, if Strabo is to be interpreted by Agatharchides, whom he copies; his tranſlator indeed ſays, Muris ſtatio *aliaque* Veneris, but the text does not require the diſtinction. See Hardouin, not. ad lib. vi. Plin. cvi. The Myos Hormus of de la Rochette I ſhould prefer for the true poſition.

[3] Ptol. 27° 15′ 0″, 27° 8′ 0″, by de la Rochette.

[4] Προκεῖσθαι δὲ νήσους τρεῖς. Strabo, xvi. 769. The Jaffateens are more than three; but the ſmaller ones are perhaps little more than rocks above water.

[5] Λιμένα μέγαν, τὸν εἴσπλουν ἔχοντα σκολιόν. Strab. ibid.

with

with this additional motive; that being in a lower part of the gulph, it facilitated the communication with the ocean, or the coaſt of Africa, and lay more convenient for taking advantage of the regular winds within the ſtraits, or the monſoons in the Indian ocean. The plans of Philadelphus, indeed, ſeem to have been larger than either he or his ſucceſſors carried into execution: he had evidently ſent travellers to penetrate into the interior by land, while his fleet was exploring the coaſt. Pliny mentions the names of Dálion, Ariſtócreon, Bion and Báſilis [6], as viſitors of Ethiopia; and Simónides as reſiding five years at Meroè; while Timoſthenes [7] went down the coaſt as far, perhaps, as Madagaſcar, but certainly lower than the fleets of the Ptolemies traded [8], or the Roman fleets in the age of the Periplûs. The account of Agatharchides, who lived in the reign of Philométor, goes no lower on the weſtern ſide of the gulph than Ptolemáis Thêrôn; and in his time the commerce ſeems ſo generally to have ſettled at Myos Hormus, that no mention of Berenícè occurs in the whole work [9]. Under the ſucceſſors of Philométor, this

[6] Plin. lib. vi. c. 35.

[7] There is ſome reaſon to heſitate in giving credit to Timoſthenes, as he says the Red Sea is two days ſail acroſs and *four days* ſail in length. Plin. lib. vi. Four days (if it be not an error of Pliny's) cannot by any means ſuffice for a courſe of nine hundred miles. See Fragm. Artem. Hudſon, vol. i. p. 88.

[8] This is ſimilar to what has happened relative to our own diſcoveries. Sir F. Drake explored the weſtern coaſt of America, to the north of California, where no navigator followed him till almoſt 200 years after, when the Engliſh, Ruſſians, and Spaniards have interfered with each other in Nootka Sound. In the ſame manner alſo the Carthaginian commerce on the coaſt of Africa ſettled at Cernè, though Hanno had gone much farther to the ſouth.

[9] Neither does Diodôrus notice it, who wrote, perhaps, early in the reign of Auguſtus, and followed Agatharchides. But Strabo is diffuſe; and he adds one particular which may account for the ſilence of Agatharchides, which is, as we have juſt noticed, that Berenícè, though a ſtation, was no port. The harbour was at Myos Hormus; and the ſhips lay there till they came to Berenícè for their lading. The Periplûs alſo ſeems almoſt to join the two together, at the commencement of the Arabian voyage.

trade

trade languiſhed rather than increaſed, nor was it reinvigorated till the conqueſt of Egypt by Auguſtus.

The connexion between Myos Hormus and Berenicè, from which ports the navigation commenced, requires more conſideration than has been beſtowed upon it by thoſe who have preceded me in the inquiry.

Berenicè, according to the Periplûs, was diſtant eighteen hundred ſtadia from Myos Hormus, which, if the author reckons ten ſtadia to the Roman mile, (as d'Anville ſuppoſes) amounts to one hundred and eighty; or if he reckons eight, we obtain two hundred and twenty-five miles, for the interval between the two ports; both eſtimates are too ſhort, as the diſtance from the northern Jaſſateen to Ras-el-anf [10] is little leſs than two hundred and ſixty miles Roman. Without inſiſting upon this, Ras-el-anf is the leading point to fix Berenicè, for this is the Leptè Promontory of Ptolemy, on which Berenicè depends. "The land here," ſays Bruce, "after running "in a direction nearly N. W. and S. E. turns round in ſhape of a "large promontory, and changes its direction to N. E. and S. W. "and ends in a ſmall bay or inlet." Now this agrees exactly with the poſition aſſigned to Berenicè by Strabo, in the very inmoſt receſs of his Sinus Impurus. It may ſeem extraordinary [11], that the name of Foul Bay [12] ſhould appear in our modern charts in this very ſpot,

[10] Cape Noſe.

[11] From the appearance of Foul Bay, on de la Rochette's chart, I conclude it to be a modern nautical name. Its correſpondence with the ancient Sinus impurus is confirmed by d'Anville as well as de la Rochette. See his Golfe immonde. And if this is eſtabliſhed, Strabo's expreſſion, ἐ. βύθῳ τῷ κόλπῳ, *in the inmoſt receſs of the bay*, ought, in my opinion, to determine the queſtion.

[12] Ἀκάθαρτος is rendered improperly by *impurus* and *immundus*. It is literally both here and in the Periplûs, p. 12. what we ſhould call in Engliſh Foul Bay, from the foulneſs of the coaſt, ſhoals, and breakers. Ἀκάθαρτον Κόλπον. . . "τὸν ἀκάθαρτον δὲ καὶ ἑξῆς χωρίον καὶ ῥηχίνης ὑπερέχεται καὶ πολὺν καταλαμβάνων τόπον· ἐνταῦθα δ' ἱδρύσθαι βερενίκην . . . ἐν βάθει κόλπου. Strabo, lib. xvi. p. 769.

and marked with the ſhoals and breakers which entitled it to the ſame appellation in the time of Strabo. But ſuch is the fact, and de la Rochette's chart [13] gives us a ſmall anchorage or inlet in the very bottom of the bay, which he ſtyles Minè, or Belled-el-Habeſh [14], the port of Abyſſinia. Theſe circumſtances are farther corroborated by the chart which Mercator extracts from Ptolemy, and by Ptolemy's own diſtances in longitude and latitude from Leptè. Col. Capper [15] has ſuppoſed that the ſite of Berenícè cannot be determined, and d'Anville has placed it nearer to Leptè; but in this, it is probable he was determined by the latitude of Syênè, for both are ſuppoſed to be tropical, and Col. Capper has poſſibly not applied his ſuperior information to this object. I fix it at the port of Habeſh, not from latitude, but local relation. For Syênè is in latitude 24° 0′ 45″, and this port is in 23° 28′ 0″, according to de la Rochette. If then we were to be determined by the tropick, the port of Habeſh is more tropical than Syênè. But the ancients were by no means accurate in theſe coincidences. Meroè and Ptolemáis are ſtill leſs reconcileable than Berenícè and Syênè; and yet the reſpective correſpondence of the four places was admitted. I am much more led by exiſting circumſtances than theſe eſtimates: a coaſt falling in, as deſcribed by the original voyagers, and a port found at the termination where it ought to be, tend more to aſcertain a poſition when ancient accounts are to be conſidered, than aſtronomical calculation. But I do not aſſert the identity, I know the difficulties, I know that the Topaz iſland of Strabo is

[13] D'Anville has the ſame, and Bruce the bay.

[14] Minè [illegible] ſignify a fort or caſtle. The principal Mameluk at Cairo, is ſtyled Sheik-el-Belled, the ſheik of the [illegible].

[15] Page 57.

dubious

dubious [16], but as a choice is neceſſary, I ſelect the port of Habeſh for Berenícè, and I truſt the ſolution of the problem to further inquiry.

Both from Myos Hormus and Berenícè, the fleets ſailed for Africa and Arabia in the month of September; and for India in July [17]; dates which agree admirably with the regular winds, as ſtated by Bruce. For, in the firſt inſtance, if they cleared the gulph before November, they in that month fell in with the wind, which carried them down the coaſt of Africa, and which ſerved them to return in May. And in their voyage to India, ſailing in July, if they cleared the gulph before the 1ſt of September [18], they had the monſoon for nearly three months to perform the voyage to the coaſt of Malabar, which was generally completed in forty days.

III. But before we enter upon our navigation we muſt examine the previous preparations in Egypt, commencing our inquiries from Alexandria, the head and centre of all the commerce between India and Europe for ſeventeen centuries [19].

[16] There was a Sapphire, an Emerald, and a Topaz iſland in the Red Sea; all three give riſe to much fable and much uncertainty. Strabo's Topaz iſland is the ſame as this Serpentine. Whether both names ought to relate to the iſland at Ras-el-anf, I cannot ſay. That iſland is the Macouar of Bruce; the Emil or Emerald iſland of de la Rochette, the Inſula Veneris of Ptolemy. Strabo's Topaz iſland is lower than Berenícè. It may be the modern Zemorgete, the Agathonis Inſ. of Ptolemy, but the confuſion is endleſs.

[17] See Periplûs, p.p. 5, 13, 29, 32. The author mentions the Egyptian as well as the Roman months Tybi, January; Thoth, September; Epiphi, July. A proof that he was a reſident in Egypt if not a native, and that he wrote for the traders in that country.

[18] This is fixed to a certainty by Pliny, who ſays, they ſailed at the riſing of the Dog-Star, July 26, and reached Okelis in thirty days, from whence to Muziris the voyage is uſually performed in forty days. Lib. vi.

[19] Eighteen, reckoning from the death of Alexander.

The principal merchants, who carried on this commerce both under the Ptolemies and the Romans, reſided at Alexandria; and though the Ptolemies, for their own intereſt, might allow others to employ their capital in this trade, and the Romans certainly would not ſuffer themſelves to be wholly excluded, ſtill the ſtanding law of the country was, that every merchant muſt employ an Alexandrian factor for the tranſaction of his buſineſs; and this privilege alone, with the profits of the tranſport, is ſufficient to account for the immenſe wealth of the metropolis[20], excluſive of all other advantages.

In the latter end of July the annual or Eteſian wind commences, the influence of which extends from the Euxine Sea to Syênè in Upper Egypt. Blowing from the north it is directly oppoſite to the courſe of the Nile, and prevailing for forty days while the river is at the height of its ſwell, it affords an opportunity of advancing againſt the ſtream, with more convenience than other rivers are navigated in their deſcent. With the aſſiſtance of this wind, the paſſage from Alexandria up to Coptus was performed in twelve days, which, as the diſtance is above four hundred miles[21], ſufficiently proves the efficacy of the wind that carried them.

Two miles from Alexandria, ſays Pliny, is Juliopolis, where the navigation to Coptus commences; an expreſſion not very intelligible without the aſſiſtance of Strabo. For why ſhould he mark the departure from Juliopolis rather than Alexandria? Strabo informs us, that the veſſels navigated a canal, which extended from Alex-

[20] The revenue of Alexandria, in the world of times, was 12,500 talents, equal to 2,421,875l. ſterling. Strab. xvii. 798.

[21] Three hundred and eighty, without allowing for the ſinuoſity of the river.

andria

andria to the Canôpic branch of the Nile, at the junction of which was Schédia; here all the duties were collected on goods which paſſed upwards into Egypt, or down the Nile to Alexandria. This canal[22] in its courſe almoſt touches Nicopolis[23], (a city ſo called from the victory obtained here by Auguſtus over the forces of Antony,) and which, by its diſtance of thirty ſtadia[24], muſt be the Juliopolis of Pliny. It is probable, therefore, that before the time of Pliny, the Cuſtom-houſe had been removed from Schédia to this place.

It is then by the Canôpic branch, now almoſt neglected, that veſſels paſſed up to Memphis, and thence to Coptus. Coptus was a city in the age of Strabo who viſited it, common to the Arabs[25], as well as the Egyptians; it was not actually on the Nile, but connected with it by a canal, and was the centre of communication between Egypt and the Red Sea, by a N. E. route to Myos Hormus, and a S. E. to Berenicè. Upon reference to the map the reaſon of this is evident. The river bends here towards the eaſt, and in proportion to its inclination ſhortens the diſtance of land carriage. Coptus is ſeated almoſt in the centre between Ghinnè and Kous. Ghinnè is the ancient Kænè[26], and is the modern point of

[22] This canal has ſtill water in it during the inundation, and boats paſs.

[23] See Dion. Caſſius, lib. ii. p. 282. Lat. ed.

[24] Strabo, lib xvii. p. 795.

[25] The preſent government of Egypt is divided between the Turks, the Mammelues, and the Arabs. The Turks, though ſovereigns, have the leaſt ſhare. The Mammelues have twenty-four beys, nominally dividing the whole country from the ſea to Syene, all-powerful at Cairo, but never compute as to their number in the country, according their influence with the Arab ſheiks. The Roman government was firm and imperious, but even under that, as appears from this paſſage of Strabo, the Arabs found means to inſinuate themſelves into a ſhare of the power at Coptus, and, as we may from the circumſtance conclude, poſſibly in other places.

[26] Καινη πολις, Neapolis, or the new city, by its name evidently of Greek extraction.

COM-

communication with Coſeir [27]; the port on the Red Sea, where the little commerce which remains is carried on between Upper Egypt and Arabia. Kous aroſe in the middle ages from the ſame cauſe, and became the principal mart of the Said [28]. Theſe three places all lie on the ſame curvature of the river, and all grew into importance at different periods, from the ſame cauſe; the neceſſity of conducting land carriage by the ſhorteſt road.

It has been already noticed, that notwithſtanding Berenícè was built by Philadelphus, the route of the caravan thither, and the port itſelf were little frequented, as long as the Ptolemies reigned in Egypt. The firſt mention I can find of it is in Strabo, and he viſited the country after it was under the power of the Romans. The Romans ſaw what Philadelphus had deſigned, and they had the penetration, from their firſt entrance into the country, to reap the advantages which his ſucceſſors had neglected. In the courſe of ſix or ſeven years an hundred and twenty ſhips ſailed from this port for India [29]; theſe, indeed, were but a ſmall part of the whole.

[27] Irwin reckons one hundred and fifteen miles from Coſeir to the Nile, vol i. p. 234. Brown rode it on dromedaries in three days.

[28] D'Anville, Geog. Anc. vol. iii. p. 33.

[29] It has everywhere been ſuppoſed, that ſingle ſhips did ſail both to India and Africa by coaſting, previous to the diſcovery of Hippalus; it has everywhere been allowed that the Arabians traded to India, and the Indians to Arabia, and probably with a knowledge of the monſoon. But this paſſage of Strabo's ſtands alone as an evidence, that a fleet ſailed from Egypt directly to India. If it did ſail, it muſt ſtill have coaſted the whole way. But might not Strabo, from knowing they brought home Indian commodities, have ſuppoſed that they ſailed to India, when in reality they went no farther than Hadramant in Arabia, or Moſyllon on the coaſt of Africa; where they found the produce of India?—I do not approve of contradicting the aſſertion of any intelligent author, ſuch as Strabo; but I recommend it to the conſideration of better judges, whether a circumſtance of this magnitude ought to be eſtabliſhed on a ſingle paſſage. It is alſo to be noticed, that Arabia was ſometimes called India by the ancients, not from error, but becauſe it was on the other ſide of the Red Sea, and becauſe the commodities of India were found there. So Indorum promontorium in Juba, the ſame as Leptè Acrè is Ras-al anf, whence the trade to India commenced. Indos Juba vocat Æthiopas, Troglodytas. Hardouin, not. ad Plin. vi. 34. but Hardouin is miſtaken, and probably Juba. It is the Indian Cape and Port, ſo called from the Indian trade at Berenícè. In what ſenſe the fleets ſailed from Egypt to India, will be conſidered at large in the fourth book.

The

The bulk of the trade ſtill paſſed by Coptus [30] to Myos Hormus, and continued in the ſame courſe till the period in which the Periplûs was written; this is the principal reaſon which induces me to believe that the Periplûs is prior to Pliny, and aſſign it to the reign of Claudius, or Nero; for Pliny is the firſt that ſpecifies the ſtages of the caravan, or gives us reaſon to believe that Berenícè was the grand centre of commerce. That it was not ſo when the author of the Periplûs wrote is evident, becauſe he commences his route from Myos Hormus [31], a proof that he conſidered it as the firſt port of departure.

Pliny on the contrary never mentions Myos Hormus in the paſſage where he details the voyage to India [32], nor does he notice it at all, except once incidentally, where he is deſcribing the weſtern coaſt of the Red Sea [33]. A proof that it was as ſubordinate in his time, as it had been pre-eminent before.

Every detail that is now extant, of the road from Coptus to Berenícè, is Roman; as that of Pliny, the Itinerary of Antoninus, in the Peutingerian tables, and the anonymous geographer of Ravenna [34]. There is no Greek account of it extant but Strabo's, and he viſited the country after the Romans were in poſſeſſion. His information, therefore, is Roman [35]; it ſpecifies particulars of which other Greeks were ignorant; but it falls ſhort of what the Romans relate themſelves. He mentions only that

[30] Αλλὰ νῦν ἡ Κοπτὸς καὶ ὁ Μυὸςοεμος Ἐυδοκιμῖι καὶ χρῶνται τοῖς τόποις τέτοις. Strab. lib. xvii. p. 815. See a very remarkable paſſage in Ptolemy, lib. i. c. 7.

[31] Whether Myos Hormus and Berenícè may have been comprehended in the mention of one as conjectured above, muſt remain a doubt, as there are no circumſtances to aſcertain it.

[32] Lib. vi. c. 26.

[33] Lib. vi. c. 33.

[34] Lib. ii. p. 755. in ed. Var. Pomp. Mela.

[35] Lib. xvii. p. 815.

Philadelphus

Philadelphus opened this route with an army[35], and that as it was without water, he eſtabliſhed poſts[36], both for the convenience of thoſe who travelled this way on buſineſs, and thoſe who conveyed their goods on camels.

If it ſhould be thought that this is ſaid from any deſire of amplifying the induſtry or penetration of the Romans, let it be obſerved, that Auguſtus reduced Egypt into a province, in the year 30 before the Chriſtian era, and that in leſs than ſix years Petronius had penetrated into Ethiopia, and reduced Candácè queen of Meroè or Atbara; that Elius Gallus had been ſent into Arabia with the ſame view of extending the knowledge and power of the Romans: and that the fleet ſailed from Berenícè inſtead of Myos Hormus. Theſe tranſactions Strabo relates as an eye-witneſs, for he accompanied Elius Gallus to Syénè. And in the interval between the conqueſt of Egypt and the reign of Claudius, a period of 71 years, there is every reaſon to ſuppoſe, that a province ſo productive, and a commerce ſo advantageous, had never been neglected. But it was not till the diſcovery of the monſoon, which we place in his reign, that all the advantages of Berenícè would become obvious. This would by degrees draw the concourſe from Myos Hormus; it had not operated eſſentially in the age of Strabo; the change was beginning to be felt when the Periplûs was written; it was fully effected in the time of Pliny.

[35] The road between Coptus and Myos Hormus he deſcribes more particularly. A proof that it was ſeldom known. It was ſeven or eight days journey, formerly performed on camels in the night by obſervation of the ſtars, and carrying water with them. Latterly very deep wells had been ſunk, and ciſterns formed for holding water, as it ſometimes, though rarely, rains in that tract. Lib xvii. 815.

[36] Σταθμὸν or σταθμούς. Diverſoria, Caravanſerais.

The

The annexed table, compared with the map, will now ſhew all that is neceſſary to be known, better than narrative; and as it is obvious that the names are Greek, we muſt ſuppoſe that they are ſuch as were firſt given, upon opening the communication by Ptolemy, however unnoticed by the Greek writers; or that the Greeks of Egypt were employed by the Romans in forming the eſtabliſhment. The mention of the Troglodytes agrees with their hiſtory, as it has been admirably illuſtrated by Bruce; they are the Shepherds ſo much noticed in the early hiſtory of Egypt, who every year conduct their flocks and herds from the plains of Ethiopia, acroſs the mountains of the Red Sea, to avoid the fly, that ſcourge of their profeſſion. They have done this in all ages; they do it to the preſent hour; their habitation is conſequently temporary, and if they found caves[37] or hollows in the rocks, theſe they would occupy, as their name implies. Tribes of this kind alſo are naturally plunderers, and the guard neceſſary to defend the caravan in paſſing their country, is correſpondent to the circumſtances of their profeſſion and ſituation. If we add to this the paſſage of the mountains, evidently marked in Pliny, we have all the particulars that Bruce enumerates; and an evidence of that range, which he has depicted as extending parallel to the coaſt, from the ſea of Suez to the main of Africa. Below this range there ſeems to be a level towards the ſea like the Tehama of Arabia, and the Ghermeſir on the Gulph of Perſia; and I conjecture that

[37] Bruce found Troglodytes actually living in caves in Gojam; he ſaw theſe caves in Upper Egypt, and the herds paſſing at Sennaar.

Tiſebárikè[38], the name which the Periplûs gives to the tract in the neighbourhood of Berenícè, expreſſes this very level, and correſponds with the Tehama of Arabia.

I have already noticed that Berenícè lies nearly in latitude 24°, and have now only to add, that by the concurrent teſtimony of the Periplûs and Strabo, the anchorage was a bay and a road, but not an harbour.

[38] Teez-u-bareek is ſaid by Capt. Franck-lin, author of a Tour in Perſia, to be ſtill a familiar phraſe in the Perſick for *ſharp* and *thin*. It will alſo bear the ſenſe of *low* and *flat*, and in that ſenſe he ſuppoſes it applied to the low country on this coaſt. Mr. Jones interprets Bareek in the ſame manner on the coaſt of Perſia, as Gezirat al Bareek, the Low Iſland. Stuckius reads, Γῆ Ἀραβικὴ, for Τισοβαρικὴ. See Stuckius and Hudſon, Geog. Min. Peripl. p. 1.

STATIONS

To face page 82.

BETWEEN COPTUS[d] AND BERENICE.

(N. B. the *Numbers are reconciled* by the Commentators.)

Stations.	PLINY.	Miles.		Var. lect.	PEUTINGER.	Miles.		Var. lect.	ITINERARY.	Miles.	
I.	Hydrêum, or Hydreuma.	XXXII.	32	XXII.	Phœnice.	XXII.	22	XII.	Pœniconiconon [[e] Φοινικῶνος κώμη].	XXVII.	27
II.					[a] Aphrodites [Κώμη].	XXIV.	24		Didyme [Κώμη].	XXIV.	24
III.	In monte, a day's journey.	XXXII.	32		[b] Didymos.	XX.	20		Afrodito [i. e. Aphrodites κώμη].	XX.	20
IV.	Hydrêum, 95 miles from Coptus.	XXXI.	31		Compasis [90 miles from Coptus].	XXV.	25	XV.	Compasi.	XXII.	22
V.					Dios [Κώμη].	XXII.	22		Jovis [Κώμη].	XXIII.	23
VI.	In monte, a day's journey.	XLIV.	44		Xeron [without water].	XXIV.	24		[b] Aristonis [Κώμη].	XXV.	25
VII.					[c] Phylacon [φυλάκων κώμη].	XXIV.	24		Falacro [Φυλάκων].	XXV.	25
VIII.	Hydrêum Apollinis, 184 miles from Coptus.	XLV.	45		Apollonos [Κώμη,] [184 miles from Coptus].	XXIV.	24		Apollonos, [Κώμη.]	XXIII.	23
IX.	In monte, a day's journey.	XXV.	25		Cabau.	XXVII.	27		Cabalsi [Cabalasi, d'Anville].	XXVII.	27
X.	Novum Hydrêum, 234 miles from Coptus.	XXV.	25	[c]CXXX.	Kenon Nidreuma, [Καινὸν Ὕδρευμα,] [235 miles from Coptus].	XXIV.	24		Kænon Didreuma [Καινὸν Ὕδρευμα].	XXVII.	27
XI.	Troglodyticum Hydrêum, a guard.	IV.	4	VII							
XII.	Berenicè, 258 miles from Coptus.	XX.	20		Pernicide portum [Berenicè portus].	XXII.	22		[i] Beronicèn.	XVIII	18
			258				[k] 258				261

REMARKS.

Pliny acknowledges, that though he names but nine stations, twelve days are employed in this journey; and the caravan moves chiefly in the night. Thus his three first stages are four days journey; his two next four days; and his four last ought to be three; for Peutinger and the Itinerary make eleven days journey. And, perhaps, one ought to be added to all at Phylacòn; for the guard was possibly to exact the customs, as well as to protect.

By Pliny's account the guard was a protection against the Troglodytes on the coast. Convenience required it, perhaps, to be moved inland, in a later age.

[a] [b] Didyme precedes Aphrodites in the Itinerary. A proof that the transposition of names of stations is no unusual error even in authentic documents.

[c] The guard, according to Peutinger and the Itinerary, is on the passage of the mountains. According to Pliny, twenty miles only from Berenicè. Different causes might operate to make the change in different times. The Troglodytes, always robbers, might change their haunts. The fort for the guard was two miles out of the road, in Pliny's account. See Strab. lib. xvi. De Ichthyophagis Æthiopicis.

[d] Coptus is not on the Nile, but at a small distance, with a canal from the river, in latitude 25° 50′, twelve or fourteen miles from Κανὴ, Kœne, Ghinna, from whence the caravan passes at this day to Cosseir, by a much shorter route. This route is nearly the same as the ancient one to Myos Hormus. See Bruce, Irwin, vol. i. 234.

[e] CXXX, a corruption of CCXXX, CCXXXIII, or CCXXXIV, all which occur.

[e] Φοινίκων ἱερόν? Query.

[b] Aristonis. An Ariston is mentioned by Diodorus as sent to survey the Gulph of Arabia to the ocean. Diod. lib. iii. 209. ed. Wes. Salmasius. Plin. Ex. 1184.

[i] Beronicè and Pernicide, nautical or commercial corruptions of Berenicè, a city so called from Berenicè, mother of Ptolemy Philadelphus. Pliny, vi. 33.

[k] Two hundred and fifty-eight miles. D'Anville's map gives two hundred and fifty in a right line, but query, whether it is not accommodated? Berenicè is under the same parallel as Syênè, 24° 0′ 45″. Coptus lies in 25° 50′, it still exists as Kest.

N. B. The whole table, except the explanations between brackets, is in the originals, as stated by Salmasius, p. 1184.

The anonymous geographer of Ravenna published in the Var. edition of Mela has these names. Lib. ii. p. 755, with variations.

FROM BERENÍCÈ TO PTOLEMÁIS THÊRÔN OR EPTTHÉRAS.

IV. SOUTH of Berenícè, in the tract of low country between the mountains and the ſea, called Tiſebarikè, is the habitation of the Troglodytes, eſteemed as Ichthyophagi or Fiſh Eaters, who live in the clefts and caverns of the mountains, diſperſed and independent. They are incloſed by more inland tribes, who are diſtinguiſhed as Akridóphagi [39] and Moſkhóphagi, titles which imply that their food is locuſts and veal. A ſtrange peculiarity! but as locuſts are no uncommon food either on the coaſt of Africa or Arabia, ſo, perhaps, the latter diſtinction intimates a tribe that fed on the brinde [40], or fleſh cut out of the living animal, ſo graphically deſcribed by Bruce [41]. Theſe tribes are under the regular government of a king.

Below the Moſkhophagi lies the little town of Ptolemáis Thêrôn, ſo called from Ptolemy Philadelphus, who ſent his hunters here to procure elephants for his army. Here the true ſhell of the land tortoiſe is to be procured. It is white [42], with a ſmall ſhell, and in no great quantity. The elephants alſo are ſmall, like thoſe obtained at Adûli.

[39] By a comparative view of theſe in Agatharchides, the ſite we ſhould allot to them would be in Nubia or Sennaar, or between thoſe places and the mountains which line the coaſt.

[40] Perhaps the title of Κρεωφάγοι, which Strabo confers on this or ſome neighbouring tribe, is equivalent. See Agatharchides, p. 40. Hudſon.

[41] A paſſage follows which is imperfect. It ſeems to deſcribe another tribe ſtill more inland, and weſt of the Moſkhophagi. Compare with Agatharchides, p. 36, et ſeq.

[42] Λευκὴν μιχροτέραν τοῖς ὀστράκοις, rendered by Hudſon, Candidam minoribus teſtis præditam. See alſo Perip. p. 17, where this interpretation is confirmed.

This place has no port, and is approachable only by boats. It lies about four thouſand ſtadia from [the harbour which is eſtabliſhed for] the reception of ſuch articles of commerce as are brought from beyond the ſtraits[43], that is from Berenícè. This diſtance agrees with Ras Ahehaz, or Ageeb, where d'Anville places it, if we reckon the ſtadia, as he does, ten to a mile. The cape is laid down in latitude 18° 20′, by d'Anville; 18° 31′, by de la Rochette; 18° 10′, by Bruce.

If this be true, the ancient geographers muſt be greatly miſtaken, who place it under the ſame parallel with Meroè, to which they aſſign 16° 25′. This parallel is of great importance: it was traced by Eratoſthenes to whom we owe the doctrine of parallels. And it is aſſumed by Ptolemy as a diſtinguiſhed line both in regard to Syénè, and to the parallel of Praſum, which was the boundary of his knowledge, and which he lays down as many degrees to the ſouth, as Meroè is to the north of the equator.

If then we could fix the poſition of Ptolemáis by reference to the parallel of Meroè, it would give conſiſtency to the Periplûs, in a paſſage where the meaſures are more difficult to reconcile than in any other part of the work, for according to de la Rochette

Mineh-Beled-el-Hbeſh, or Berenicè, is in lat.		23° 16′ 30″
Ras Ahehaz, or Ptolemáis	-	18° 31′ 0″
Maſua, or Adûli	-	15° 46′ 0″

[43] Ἄπιχον τῶν πέρας τῆς ἀναχομιδῆς, diſtans a principio ſinus. Hudſon. Which cannot be true in any ſenſe, for whether the beginning of the gulph be taken from the ſtraits, as Hudſon doubtleſs means, or from the ſea of Suez, this diſtance cannot be reconciled. We have had frequent occaſion to notice the expreſſion, Τάπερα for Τα πέρα, τὰ πέρας τῶν πέρας, &c. which intimates generally any commodities brought from beyond the ſtraits, but in the Periplûs conſtantly the commodities of the Moſyllitick coaſt, or kingdom of Adel; and the port eſtabliſhed for the importation or reception (ἀναχομιδὴ) of theſe commodities can be only Berenícè, the port immediately before mentioned.

which

which gives the diſtance from Berenícè to Ptolemáis three hundred and fifty-four Roman miles, and from Ptolemáis to Adûli two hundred and twenty-five; making a deficiency upon the meaſures of the Periplûs of one hundred and twenty-one out of five hundred and ſeventy-nine, if we reckon ten ſtadia to the mile Roman. The diſtances are, four thouſand ſtadia from Berenícè to Ptolemáis, and three thouſand from Ptolemáis to Adûli. It is this deficiency which has induced Mr. Goſſelin[44] to carry the Adûli of the Periplûs to Aſſab, or Saba, contrary to the opinion of all former geographers, and contrary to the local circumſtances of Adûli, ſo ſtrongly marked by our author.

The removal of Adûli from Maſua to Saba, and of Ptolemáis from Ras Ahehaz in 18° 31′ 0″ to 16° 58′ 0″, are therefore mutually connected in Mr. Goſſelin's ſyſtem; and as this brings Ptolemáis within thirty-two minutes of the parallel of Meroè, the whole would be reconcileable if we could make the meaſures of the Periplûs accord; but this is impoſſible[45]; and here Mr. Goſſelin is led into a great error, the cauſe of which I do not readily diſcover; for he ſays, that the Periplûs reckons from Adûli to the Straits of Bab-el-Mandeb eight hundred ſtadia. This is another miſtake; for the Periplûs marks the termination of theſe ſtadia at a very deep bay where the Opſian

[44] *It was at the moment that this ſheet was returned from the preſs for correction, that I received by favour of Major Ouſeley, Mr. Goſſelin's work, Recherches ſur la Geographie des Anciens, publiſhed in two volumes, at Paris; in* 1798; *and of which only a very few copies had at that time reached England. However we differ on the whole of the Periplûs, I was happy to find we agreed upon the ſubject of the circumnavigation of Africa, and I have reconſidered this article of Ptolemáis in order to advert to the points on which we differ. In regard to the remainder of my work, it was finally arranged and ſettled, and I can only notice our diſagreement by a note inſerted on ſome particular occaſions. I have found no reaſon upon the whole to abandon the ground which I had taken.*

[45] See Goſſelin, Recherches, tom. ii. p. 196. et ſeq.

ſtone

ſtone is found [46], and from that bay mentions expreſsly the commencement of the inclination which the coaſt takes to the eaſt [47], and which it continues till it joins the ſtraits: all this is true, if Adûli is fixed at Maſua, and falſe, if it is carried to Saba, or Aſſab. The Periplûs, therefore, is conſiſtent in its deſcription, and inconſiſtent in its meaſures; and to which of the two the preference ought to be given, will hardly be diſputed by thoſe who know the little certainty of all numbers in a Greek manuſcript, and how much all printed texts are corrected by circumſtances before they can be made conſiſtent.

The real poſition, therefore, of Ptolemáis Thêrôn cannot be determined from theſe data; but if we relinquiſh the meaſures of the Periplûs, and ſearch for it by the parallel of Meroè, we meet with many curious particulars to compenſate for the digreſſion, and furniſh means for the reader to determine for himſelf.

Meroè, as the firſt parallel of Eratoſthenes, became an object of the greateſt importance to all the geographers and aſtronomers who ſucceeded; and if there is any one point more than another upon which we can ſuppoſe them to have ſearched for accuracy or acquired it, it is this. Ptolemy places it in 16° 24′ 0″; or, as it appears in his tables [48], 16° 25′ 0″; but in his eighth book, he ſays, the

[46] Peripl. p. iii.

[47] Ibid. p. v.

[48] The text ſtands ις. γ. κα. which the Latin reads 15° 26′ 0″; but it is 16° $\frac{1}{3}$ = 20° $\frac{1}{12}$ = 5, that is, 16° 25′ 0″. The ancient geographers thought, if they approached preciſion within one twelfth of a degree, or five minutes, it was ſufficient; they have therefore no more minute diviſion into ſeconds; but if Meroè were in latitude 16° 24′ 0″, the line would be drawn through 16° 25′ 0″. This twelfth is expreſſed in the different copies of Ptolemy ιβ or κα, or ϛ; and ϛ is ſuppoſed to be *ten* and *two*, that is, *twelve*, or one twelfth. But the commentators and editors are not agreed upon the form of writing or manner of explication, though

the longeſt day at Meroè is thirteen hours, (which makes the latitude 16° 24′,) and the ſun is vertical twice a year, when he is diſtant (both upon his approach to the tropic and his return,) 45° 20′ 0″, from the ſolſtitial point. This ſtatement of forty-five degrees muſt be older than Ptolemy; for Pliny mentions that the ſun is vertical at Meroè forty-five *days* before, and forty-five *days* after the ſolſtice, in which he ſeems to follow Philo [49], and then adds, that on theſe two days the ſun is in the eighteenth degree of Taurus, and the fourteenth of Leo.

Now in this paſſage there are two errors; for firſt, forty-five *degrees* are not the ſame as forty-five *days*, as there are three hundred and ſixty-five days in a year, inſtead of three hundred and ſixty, which there ought to be, to make the two agree; and ſecondly, the place of the ſun is miſtated, both upon his approach and his return, for by a calculation of Mr. Wales's, with which he favoured me a few days before his death, it appears,

" That the ſun, *at this time*, is in the eighteenth degree of " Taurus, forty-four days before the ſolſtice, which would give " 17° 13′ N. for the latitude of Meroè. And in the fourteenth

though they all interpret it one twelfth, or five minutes. See lib. i. c. 10. διὰ Μερόης..... ιϛ. γ̄. ιϚ. the ſame which is written in the tables, ιϛ. γ̄. ια. rendered by Montanus, diſtat partibus æqualibus ſedecim et tertia cum *duodecima*.

[49] See Bruce, vol. iv. p. 540, and Strabo, lib. ii. p. 77. where mention is made of Philo, who wrote an account of the navigation into Ethiopia, [by the Nile,] and who mentions the vertical ſun at Meroè forty-five days before the ſummer ſolſtice. He is noticed as remarking the ſhadows of the Gnomon, and agreeing with Eratoſthenes. Some authority of this ſort Pliny muſt have followed, as Ptolemy was poſterior.

Pliny is reproached unjuſtly by Salmaſius. Plin. Ex. 424, as ſaying that the ſun is vertical for ninety days at Meroè. It will appear ſufficiently from this ſtatement that he makes no ſuch aſſertion; and the miſtake of Salmaſius is reprehended by Voſſius and Hardouin. See Voſſius ad Melam. ed. Varior. p. 582. Hard. Plin. lib. ii. c. 75. not. 67.

" of Leo, forty-ſix days after the ſolſtice, which gives 16° " 36′ N.

" Or again[50], if we take the other ſtatement of Pliny, forty-five " days before the ſolſtice, the ſun is in the ſeventeenth degree of " Taurus, which makes the latitude 16° 57′ N. and forty-five days " after the ſolſtice, the ſun is in the thirteenth of Leo, which " gives 10° 53′ N."

Since the communication of this ſtatement, calculated only for the place of the ſun at the preſent day, the biſhop of Rocheſter has added to the many former kindneſſes I have experienced from his friendſhip, and derived from his comprehenſive view of the ſcience, the following particulars:

" Nothing is aſſumed by Ptolemy but what is ſtrictly true, that at " equal diſtances from the ſolſtitial point, on one ſide and the other, " the ſun has equal declination. He gives us in this paſſage two " diſtinct principles for determining the latitude of Meroè; the " length of the longeſt day, and the diſtance of the ſun from the " ſolſtitial point, when he culminates in the zenith of the place. " The two principles agree ſufficiently in the reſult, and the latitude " which they give agrees with the latitude of Meroè, as deduced " from other principles, and ſtated in other parts of Ptolemy's " works.

" The diſtance of the ſun from the ſolſtitial point, when he cul- " minated in the zenith of Meroè, he tells us was 45° 20′. The

[50] To Mr. Wales I was known only by the courteſy of literature; but ſuch was his love of ſcience, that I never conſulted him without receiving every aſſiſtance that it was in his power to give. I inſert this as his laſt favour, and not without a tribute of gratitude to the memory of a man, who was as excellent in private life, as an huſband and a father, as he was eminent in the ſcience he profeſſed, the friend and companion of the illuſtrious Cook.

" obliquity

" obliquity of the ecliptick at that ſeaſon of the year, *in the year of* " *our Lord one hundred*, was 23° 40′ 50″; the ſun's declination, there- " fore, at the diſtance of 45° 20′ from the ſummer ſolſtitial point " would be 16° 24′ 3″ N. and ſo much was the latitude of Meroè; " for when the ſun is vertical at any place, the declination of the " ſun and the latitude of the place muſt be exactly equal.

" But he tells us alſo, that the length of the longeſt day at Meroè " was thirteen hours; and I find by calculation, that in this latitude " of 16° 24′ 3″, the longeſt day muſt be exactly twelve hours fifty- " nine minutes and twenty ſeconds, wanting only forty ſeconds of " thirteen hours.

" Again, aſſuming thirteen hours for the length of the longeſt " day, I find the latitude exactly correſponding to be 16° 34′ 27″. " But this confirms the concluſion from the former principles, " notwithſtanding the exceſs of 10′ 24″; becauſe the phæno- " menon of a longeſt day of thirteen hours would certainly take " place in a ſomewhat lower latitude, the day being lengthened, " in all latitudes, ſeveral minutes, by the double effect of the hori- " zontal refraction."

Having thus eſtabliſhed the latitude of Meroè upon Ptolemy's principles, it will not be foreign to our purpoſe if we examine the meaſures in Strabo, according to the eſtimate of Eratoſthenes; for notwithſtanding all meaſures of this ſort are precarious, ſtill, when they come within a few minutes of coincidence, the approximation is more ſatisfactory than the diſagreement offenſive. The account ſtands thus:

	Stadia.
The parallel through the Cinnamon country, which was the laſt parallel of the early geographers, is north of the equator - -	8800
The ſame parallel is ſouth of Meroè - - - -	3000
Therefore Meroè is north of the equator - - - -	11,800

Now Eratoſthenes[51] reckoned ſeven hundred ſtadia to a degree; and if we divide eleven thouſand eight hundred by ſeven hundred, it gives for the latitude of Meroè 16° 51′ 34″, differing from Ptolemy only 27′ 34″, which is an approximation the more remarkable as Ptolemy reckons five hundred ſtadia to a degree, and Eratoſthenes ſeven hundred; and this circumſtance may give riſe to a conjecture, that Strabo had a map of Eratoſthenes before him, and meaſured off theſe degrees from the parallels of that geographer, by the compaſſes, as we ſhould do at the preſent hour[52].

But we have another coincidence between the meaſures of Pliny and the obſervations, which is equally remarkable; for Pliny has preſerved the report of two Roman centurions ſent into Ethiopia by Nero, who reckoned eight[53] hundred and ſeventy-three miles from Syênè to the confluence of the Nile and Aſtáboras, and ſeventy from the confluence to Meroè[54]. The former number we muſt exhauſt by ſuppoſing that the centurions followed the winding of the river, which Pliny ſpecifies; and upon the latter, where the diſtance is ſo ſmall, there can be no material error; ſeventy Roman

[51] Εἰ δέ τις ἰὸς τριακόσια ἑξήκοντα τμήματα τέμοι τὸν μέγιστον τῆς γῆς κύκλον, ἴσαι ἑπτακοσίων σταδίων ἕκαστον τῶν τμημάτων. Strab. lib. ii. p. 132.

[52] It is remarkable that this meaſurement by ſtadia, carried on to Syênè, and reckoning that place five thouſand ſtadia north of Meroè places it in latitude 24° 0′ 0″, which Bruce fixes by repeated obſervations in 24° 0′ 45″.

[53] Theſe numbers vary in the copies to eight hundred and ninety-two, and nine hundred and twenty eight, but with this difference we are not concerned at preſent. Bruce reclaims againſt them as carrying Meroè to Gojam; but if meaſured by the river, which is remarkably tortuous in this part of its courſe, the numbers are not too high.

[54] Pliny mentions the places which occur on each ſide the river in their progreſs to Meroè; and he adds, that theſe are very different from the names given by the Greeks, whom Ptolemy Philadelphus ſent into the ſame country, and much fewer; this deſolation, he obſerves, was not cauſed by the Romans, but by the previous wars between the Egyptians and Ethiopians. But as he mentions likewiſe, lib. vi. c. 34, 35, that the inhabitants on the Nile, from Syênè to Meroè, were not Ethiopians but Arabs, may we not conclude, that the cauſe of deſolation was imputable to them in that age as it is at preſent? See Bruce, iv. 330, et ſeq.

miles

miles then approach within five of a degree, which, as we have no ancient map to guide us, we may try by the ſcale of Bruce. Bruce had good inſtruments, and had been long practiſed in obſervation; but he was ſtruggling for his life, and his obſervations muſt have been haſty: ſtill as we have no better, and no traveller is ſoon likely to correct his errors if he is miſtaken, we are entitled to uſe his ſtatement till a better can be obtained. He fixes

Herbagi in	14° 30′ 0″.	
Halfaia	15° 45′ 54″.	Long. from Greenw. 32° 49′ 15″.
Gerri	16° 15′ 0″.	
Chendi	16° 38′ 35″.	Long. 33° 24′ 45″.
Fifteen miles N. of the junction at Gooz, that is, the confluence of the Nile and Aſtaboras	17° 57′ 22″ [55].	

In conſequence of theſe obſervations Bruce places Meroè at Gerri, or very near it, as correſponding beſt with Ptolemy. And for the ſame reaſon he might have preferred Chendi, which differs but five minutes more. A queen reigning there, and the title of Hendaque, ſuggeſted to him the name of Candácè, and the queen of Meroè. But he had reaſon afterwards to conjecture that he found the remains of Meroè at a village called Gibbainy, for here he diſcovered ruins [56] which were evidently Egyptian or Ethiopick, and ſuch as he had ſeen no where from the time he left Axum. He likewiſe found an iſland in the Nile called Kurgos by the natives: and ſuch an iſland, which ſerved for a port to Meroè, Pliny mentions by the name of Tadu [57]. Theſe circumſtances are ſo connected, that if it were

[55] By repeated obſervations of the ſun and ſtars, made for ſeveral ſucceeding days and nights. Bruce, vol. iv. p. 537.

[56] Vol. iv. p. 538. Broken pedeſtals deſigned for the ſtatue of the dog, pieces of obeliſks, hieroglyphicks. The Arabs mentioned ſtatues of men and animals, all of black ſtone.

[57] Ipſum oppidum Meroen ab introitu inſulæ, [i. e. a loco ubi confluunt Nilus et Aſtaboras,] abeſſe LXX millia paſſuum. Juxtaque

were not carrying the latitude too far north, we might prefer his conjecture to his position of Meroè. There is yet another fact ſtill more appropriate; for if his obſervations are accurate, and he has placed the confluence of the two rivers exact, the diſtance from the confluence to Gibbainy meaſures upon his map as preciſely fifty minutes as poſſible; an approach ſo near to the ſeventy Roman miles of Pliny [55], that no greater accuracy can be required. It is true that this correſpondence will depend on the correctneſs of Bruce's obſervations; but if they are faulty, who ſhall be the traveller to correct them? It is true alſo, that Bruce's latitude of Gibbainy is 17° 4′ 0″, which is forty minutes to the north of Ptolemy's poſition, a difference, perhaps, not too great to counteract the evidence derived from the iſland in the Nile, if there be none in a higher part of the river to correſpond. And now, if it ſhould ever be the lot of a future traveller to tread this arid ſoil again, at this point his ſearch for Meroè ſhould commence; and if no ruins were found farther to the ſouth,

aliam inſulam Tadu dextro ſubeuntibus alveo [i. e. Nilo] quæ portum faceret. I. Ædificia oppidi pauca. II. Regnare fœminam Candacem quod nomen multis jam annis ad reginas tranſiit. Delubrum Hammonis et ibi ſacrum. III. Et toto tractu ſacella. Plin. lib. vi.

Beſides the evidence this paſſage gives for an iſland at Meroè, it contains ſome features common to Ethiopia, Nubia, and Abyſſinia. I. Ædificia oppidi pauca, is a circumſtance as applicable to Gondar and Sennaar now, as to Meroè formerly. II. Candácè is the name of the queen ſubdued by Petronius. And a Candácè's eunuch was baptized by Philip. Bruce found the name of Hendaquè ſtill exiſting. III. Toto tractu ſacella. In Abyſſinia the churches ſtood ſo thick, that the ſervice could be heard from one to the other, as is noticed by the Jeſuits and confirmed by Bruce. In theſe reſpects, therefore, the manners of all theſe nations appear ſimilar. Pliny notices, in another paſſage, that they had forty-five kings: a ſtrong characteriſtick of Abyſſinia, perhaps, rather than Meroè. The temple of Hammon, Strabo informs us, had been neglected by the Romans, and the ſuperſtition deſpiſed. In his age, therefore, the Oaſis itſelf of Hammon had fallen to decay. It might ſtill, however, preſerve its reputation among the Meroites. See Strabo, lib. xvi. p. 815. Meroè is called Naulababe, the mother of ports, by the Egyptians; Neuba, by the natives; and Saba, by the Abyſſinians. Marmol vol. i. p. 45.

[55] Seventy-five to a degree.

ſouth, he might greet Bruce as the diſcoverer of Meroè, an honour which, perhaps, would be leſs diſputed than his pretenſions to the firſt diſcovery of the ſources of the Nile. We ought not to be ungrateful to thoſe who explore the deſert for our information: Bruce may have offended from the warmth of his temper, he may have been miſled by aſpiring to knowledge and to ſcience which he had not ſufficiently examined; but his work throughout bears the internal evidence of veracity, in all inſtances where he was not deceived himſelf, and his obſervations were the beſt that a man furniſhed with ſuch inſtruments as he had, and ſtruggling for life, could obtain; they therefore deſerve reſpect; and if we ſhould be diſpoſed to adopt his conjecture, rather than his poſition, from the circumſtances before us, the extreme difference between him and the ancient aſtronomers is 16° 24′ 0″, and 17° 4′ 0″, a diſagreement, perhaps, leſs allowable in this inſtance than moſt others, but ſtill excuſable, from the imperfection of all ancient obſervations depending on the ſhadow of the Gnomon, and the length of the day, and thoſe of Ptolemy more eſpecially.

If by ſtating theſe particulars relative to the latitude of Meroè, we could have obtained the poſition of Ptolemáis, we ſhould not have to aſk the reader's pardon for the digreſſion; but all that we pretend to deduce from it is, that Ptolemáis cannot be fixed at Ras Ahchaz, or Ageeg, where it is placed by d'Anville and Bruce. The Shumeta, or Nubian Foreſt, which was the reſort of the elephants, when Ptolemy built the city, and continues ſo to the preſent hour, is ſuppoſed to commence in the neighbourhood of that Cape, in latitude 18° 31′ 0″, which diſagrees more than two degrees with Ptolemy, and nearly one and an half with the conjecture of Bruce. If we deſcend

the

the coaſt a degree and a half, we arrive at a bay in the middle of the Nubian foreſt, the lower point of which is nearly in latitude 17° 6′ 0″; a correſpondence with Bruce's conjectural parallel of Meroè, ſo near as to be ſatisfactory. On a projecting point of this ſort Ptolemáis was built by Eumedes[59], and ſecured from the natives by a foſs carried round the angle from ſea to ſea; and if this ſituation ſhould appear reaſonable, from the deductions we have been ſo deſirous to ſtate, a better ſpot for procuring elephants cannot be choſen.

There is not a wiſh to conceal the uncertainty of this concluſion: the coaſt is little viſited by any European veſſels, and the charts of our beſt Hydrographers are therefore leſs to be depended on: Strabo's account agrees better with the meaſures of the Periplûs, and the aſſumption of d'Anville at Ras Ahehaz. If the diſtance in the Periplûs from thence to Adûli had been equally conſiſtent, it would have been concluſive; but the whole is now determined by the parallel of Meroè, which the ancients carry through Ptolemáis, and we cannot well attribute to them an error of two degrees, on a point better eſtabliſhed than almoſt any other whatſoever.

Mr. Goſſelin carries it ſtill lower, but without a cape, or any circumſtance to mark the ſpot. And it is to be remarked, that he is ſo attached to his own eſtimates, for correcting the latitudes of Ptolemy and the other ancient geographers, that he pays little reſpect to local circumſtances and the characteriſtick features of the coaſt. As I cannot diſpute this matter on every point where we differ, I ſhall obſerve here, that his want of attention to the text appears no where more conſpicuous than at Adûli and Arômata, two places

[59] Strabo, lib. xvi. 770.

which

which the Periplûs marks with diſtinctions that cannot be miſtaken, and which Mr. Goſſelin transforms or diſplaces with great violence. The conſequence is, that he is obliged to have two Adûlis, for which there can be no warrant either in hiſtory or geography.

With whatever errors my arrangement of the coaſt may be chargeable, I truſt it will only affect individual poſitions: the general outline I am perſuaded is true. I ſubmit it, indeed, with leſs confidence to the public ſince I have peruſed the Reſearches of Mr. Goſſelin. But I ſhall not relinquiſh the ground I have taken in a ſingle inſtance. I truſt to the inveſtigation which I have patiently purſued under every difficulty, and I leave the iſſue to the judgment of thoſe who are competent to decide.

It is neceſſary now to obſerve, that the hunting of elephants eſtabliſhed at Ptolemáis is confirmed by Agatharchides, Diodórus, Strabo, and other authors. The manner of hamſtringing theſe animals was an art as perfectly underſtood by the ancient barbarians[60], as by Bruce's Agageers; and the reliſh[61] for the fleſh of the elephant is an indelible characteriſtick of the nation. Ptolemy would have redeemed the life of the animal at any price, as he wanted elephants for his army; but he met with a refuſal from the native hunters, who declared they would not forego the luxury of their repaſt for all the wealth of Egypt[62].

[60] See Strabo, lib. xvi. p. 772. Diodor. lib. iii. p. 161.

[61] They buccan it, according to Bruce; that is, cut it into thin ſtripes and dry it in the ſun.—They cut it from the living animal, according to Agatharchides and Strabo. A circumſtance ſo peculiar that it can belong to Abyſſinia or this coaſt only.

[62] See Agatharchides, p. 14. Hudſon, Geog. Min.

ADOULI.

V. From Ptolemáis, the next port we are conducted to by the Periplûs is Adúli, at the diſtance of about three thouſand ſtadia; a ſpace by no means agreeable to the difference between Ras Ageeg and this place[63], as little more than two degrees of latitude intervene, which produce ſhort of an hundred and forty miles, where we ought to find three hundred. This we are informed was a regular and eſtabliſhed port[64], and it can be no other than the celebrated harbour and bay of Maſuah, ſo well known by the accounts of the Jeſuits and of Bruce, as the only proper entrance into Abyſſinia.

It is not my intention to enter farther into the detail of this country, ſo extraordinary and now ſo well known, than I am led by the claſſical authorities before me; but they are ſo numerous, and ſo conſiſtent with modern accounts, that to neglect them altogether would be reprehenſible.

The Bay of Maſuah or Adùli has an extent of ſix miles, and is[65] open to the north caſt[66]. It contains two iſlands, upon one of which the town of Maſuah ſtands, and which, from its vicinity to the main, muſt be that of Diodôrus, as it is called in the Periplûs; ſo near, ſays the

[63] 15° 35′ 5″. Bruce, iii. p. 31.

[64] Ἐμπόριον νόμιμον, perhaps, *Juſtus Portus*, in contradiſtinction to Ptolemais and Berenicè, which were not ports but roads.

[65] Bruce, iii. p. 63.

[66] In the Periplûs, κατ' αὐτὸν τὸν Νότον, which of neceſſity we muſt render *ſecundum Notum*, as κατὰ τὴν δεξίαν, a dextrâ. I know not that the uſage is juſtifiable, but other inſtances will occur in the Periplûs, and it is impoſſible that a ſouth-weſt coaſt ſhould lie open to the ſouth-weſt, perhaps, κατ' αὐτὸν τὸν Νότον, "as you ſail or direct your courſe to the ſouth." This iſland is ſo called from Diodôrus a former navigator, as we may ſuppoſe, and perhaps the Diodôrus Samius mentioned by Ptolemy, lib. *i.* c. 7.

author,

author, that the ſea was fordable [67]. And the natives took advantage of this to attack the ſhips at their moorings. For this reaſon the merchants had afterwards preferred anchorage at another iſland, called Orînè, or the Rock, at twenty miles diſtance from the coaſt [68], which anſwers to the Dahalac of Bruce, or one of its dependencies [69]. The two iſlands in the bay are called Sheik Sede and Toualhout, and for the former, which is a title manifeſtly derived from a Sheik's tomb, De la Rochette has found the name of Dúli [70], ſtill bearing a reſemblance to the ancient Adûli.

At twenty ſtadia from the ſhore, and oppoſite to Orînè lay Adûli, which was a village of no great extent; and three days' journey inland was Koloè [71], the firſt market where ivory could be procured [72]. Five days' journey from Koloè lay Axûma, where all the

[67] The two iſlands of Sheik Sede and Toualhout are nearly one at low-water, they may have been joined formerly Bruce, iii. p. 56.

[68] Two hundred ſtadia. Dahalac itſelf is about thirty miles diſtant, but many of the iſlands dependent on it are within twenty.

[69] Dahalac, according to Bruce, vol. i. p. 350. is a low flat rocky iſland, without water, but furniſhed with tanks of extraordinary magnitude and ſtructure, for the preſervation of the rain water, which falls abundantly at certain ſeaſons. Theſe works are now in ruins, but Bruce ſuppoſes them to be the works of the Ptolemies, in the vigour of the Egyptian trade. They may be Sabêan, for Dahal, or Del, Bruce informs us, ſignifies an iſland, in Arabick; and both this Dahal ac and another Del-aqua in the Bay of Zeila, may have been iſles where the Sabêans procured water. I refer this to the inquiry of Orientaliſts.

In fixing upon Dahalac for Orînè, I am guided by the two hundred ſtadia of the Periplûs, and ſupported by d'Anville. But Orînè ſignifies *mountainous* rather than *rocky*. And Coſmas mentions ἀπὸ μιλίων δύο. Coſmas is high authority, he was at Adûli himſelf; and the mention of the iſlands Alalaiou in the Periplûs, evidently the dependencies of Dahalac, if not Dahalac itſelf, leaves little doubt on the allotment of Orinè. See d'Anville, Geog. Anc. tom. iii. p. 60.

[70] Bruce met with a Mahomet *Adûli* at Maſuah; vol. iii. p. 11. which ſeems to imply that the memorial of Adûli is not loſt.

[71] In Tigrè, the province of which Sirè is a part, the market is ſtill on the ſame footing. The beſt ſlaves, the pureſt gold, the largeſt teeth of ivory muſt all paſs through the hands of the governour of this province. Bruce, iii. p. 251.

[72] The elephant's track was firſt ſeen by Bruce, on the third day, iii. p. 71.

ivory was collected which was brought from the other ſide of the Nile, through the province called Kuenîon, and thence by Axûma to Adûli. Theſe diſtances anſwer exactly to place Koloè on the mountains[73], which commence at the back of the ſands; and eight days' journey to Axûma is a juſt allowance for about an hundred and twenty miles[74], which is its diſtance from the ſea. The province of Kuenîon is manifeſtly Sirè, which receives its name from the Dog Star, under the influence of which the rains prevail that are to inundate Egypt, and Siris[75] is ſynonimous to Kuenîon in the language of the country. Few elephants or rhinoceroſes are ſeen on the coaſt or in the neighbourhood of Adûli. The maſs of them which ſupply the trade are all killed in the interior.

The ſovereign of this coaſt, from above Berenícè[76] down the whole tract of Barbaria, is Zoſkales, he is very ſuperior to the other princes in the neighbourhood. Civilized in his manners, reſpectable in his conduct, liberal and honourable in his dealings, and inſtructed in the knowledge of the Greek language.

The province aſſigned to this ſovereign correſponds preciſely with the territory aſſigned to the Bahr-nagaſh, or king of the coaſt, under

[73] Turanta is the ridge that divides the ſeaſons, on the eaſt rainy from October to April, on the weſt cloudy, rainy, and cold from May to October. Bruce, iii. p. 65.

[74] Fifteen miles a day is not ſlow travelling in ſuch a country as Bruce deſcribes. Nonnoſus makes it fifteen from Adulè. See Photius, in Nonnos.

[75] Κυὼν, Canicula Seir, a dog in the language of the Troglodytes. Bruce, i. p. 379. See Dionyſius Perieg. where it appears that this account of the Dog Star is as old, at leaſt, as Dionyſius, or his commentators. Lin 222. and Euſtathius.

[76] Having above ventured to fix Berenícè at Belled-el-Habeſh, the port of Abyſſinia; it is ſome ſort of confirmation to find, that Berenícè is actually included in the government of Zoſkales, who is, to all appearance, the Bahrnagaſh of his age, that is, the king or governour of the coaſt, a title ſtill preſerved notwithſtanding the Turks are maſters of the ports. See Bruce, paſſim, Bahr=Sea, Nagaſh=king or governour. Whence the vulgariſm of the negus for governour, the great negus, for the king of Abyſſinia.

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the empire of Abyſſinia; and the manners attributed to him are conſiſtent with that pre-eminence which the Abyſſinians in all ages ſeem to have preſerved over the barbarous tribes by which they are ſurrounded.

How it has happened that a nation neither Nigritian or Ethiopick ſhould be ſettled in this part of Africa, diſtinguiſhed from all around them, as much formerly by their manners, as they now are by their religion, is a problem that has divided the opinion of all who have viſited the country.

That they are not of Hebrew origin appears evident, notwithſtanding their own pretenſion and the arguments of Bruce; becauſe, in the firſt place, the Jews among them continued a diſtinct tribe; and in the next, their language is written from the left hand to the right [77]. Paolino, a miſſionary on the coaſt of Malabar, aſſerts, that though the character is different, the principle, genius, and conſtitution of their language is Shanſkreet [78]. A queſtion well worthy of examination by thoſe who are qualified to purſue it. But as far as a private judgment is of weight, I muſt confeſs, that the account of Heródotus has always appeared to me the moſt rational; that they are a nation of fugitives from Egypt. Strabo, in copying this opinion, has added, that the appellation [79] they give

[77] See Butler's Horæ Biblicæ, p. 173.

[78] A ſpeculation well worthy the inveſtigation of Lt. Wilford, and coinciding with his ſyſtem.

[79] I think I can fix the ſite of the Sebritæ ſo poſitively as to identify them with the Abyſſinians; the place aſſigned to them by Strabo is Tênefis, inland from Sabai; and Sabai is both by d'Anville and Bruce ſuppoſed to be Ras Aſſab = Cape Aſſab, in lat. 13° 3′. If this be allowed, it accords intimately with Abyſſinia: becauſe as Strabo goes inland he reverts to Meroè, which proves that his detail on the coaſt, and in the interior, do not quite keep pace together. A line drawn from Aſſab to Meroè would almoſt touch Axûma, and

give themſelves is Sebritæ[80]; a term which ſignifies *Advenæ*[81], the more remarkable, as Bruce obſerves, that the original title by which they are diſtinguiſhed in their own hiſtory and language, is that of Habeſh[82], or Convenæ. It is impoſſible to ſuppoſe, that the affinity of theſe two words is accidental.

The flight of theſe exiles is fixed by Herodotus in the reign of Pſammetichus[83], 630 years before Chriſt, and only 185 years before the date of his own hiſtory; he mentions that they went to as great a diſtance[84] beyond Meroè[85], as Meroè is from Elephántinè, to the number of two hundred and forty thouſand; and that the name by which they were diſtinguiſhed as a nation was Aſmack[86], or Aſkham; an appellation which Reiſk[87] and other Orientaliſts have ſuppoſed to allude to Axúm, the Axûma or Axôma firſt mentioned expreſsly

cut Abyſſinia in the centre. I wiſh a reference to be made to the whole paſſage in Strabo. lib. xvi. p. 770, where among much obſcurity, much truth may be diſcovered. And where I ſhould think that Sukho is Suakem, but that Strabo ſays it is inland. It is in reality a town on an iſland in a bay, the approach to which is by a narrow channel like a river. See de la Rochette's map of the Red Sea. See alſo the learned Larcher's notes eighty and eighty-three, on this paſſage of Herodotus, with his citations from Plutarch de Exilio, p. 601. and from Diodôrus, lib. i. p. 77. A paſſage occurs here in Diodôrus, which I ought not to have omitted at the concluſion of the firſt book, to prove the commerce of the Greeks in the ports of Egypt. Ψαμμήτιχος ..... παρείχετο φορτία πᾶσι τοῖς ἐμπόροις, μάλιστα δὲ τοῖς Φοίνιξι καὶ Ἕλλησι. ibid.

[80] He adds, that theſe Sebritæ are under the government of the queen of Meroè, p. 771. which though, perhaps not true, diſcovers the connexion, or the ſimilarity of government.

[81] Ptolemy has the name of Sibridæ perhaps the ſame, in the Greek text Sebardæ.

[82] Bruce, vol. i. p 379.

[83] Pſammetichus died in 616. Blair. Herodotus read his hiſtory at the Olympick Games, 445, ante Chriſtum. I allow to the middle of Pſammetichus's reign.

[84] The diſtance aſſigned by Heródotus is fifty-two days to Meroè, and fifty-two beyond, which do not correſpond, if the termination is at Axûma. See lib. ii. p. 116. But beyond Egypt all muſt be report. Ariſtides, Orat. Egyp. contradicts Heródotus as to the diſtance, as I learn from Larcher, tom. ii. p. 213.

[85] Bruce, vol. i. p. 278, quotes Heródotus in this paſſage, for what he does not ſay.

[86] It ſignifies the left hand. Herod. becauſe they had been guards on the king's left hand, perhaps the left wing of his army. See Diod.

[87] See Weſſeling, not. 71. Herod. lib. ii. p. 116.

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in the Periplûs: a ſuppoſition which there is very little reaſon to diſcredit. In addition to this teſtimony of Heródotus, we have a variety of evidence from other authors, that Adûli [88] was built by exiles from Egypt; and if Bruce had not had ſuch a predilection for his Shepherds, he muſt have diſcovered, that the monuments he found at Axûma himſelf, the obeliſk [89], the tot, the table of hieroglyphics, and the ſphinxes, are perfectly Egyptian, and not paſtoral, Troglodytic, Meroite, or Greek.

That the Greeks from Egypt landed at Adûli, and ſubdued the country as far as Axûma, or farther, is evident. Ptolemy Philadelphus puſhed his diſcoveries beyond Meroè by land, and by ſea, perhaps, as far as Madagaſcar; and the famous inſcription preſerved by Coſmas Indicopleuſtes, is a proof that Euergetes ſubdued a conſiderable part of Abyſſinia.

This inſcription is reported by Coſmas to have been engraved on a tablet and on a marble chair or throne of the conqueror; and to have been extant in his own age at Adûli, 545 years after the Chriſtian era. It is not without its difficulties; but Coſmas, from internal evidence, was certainly at Adûli [90] himſelf, and acquainted with Abyſſinia. Ptolemy appears, by the inſcription, to have paſſed the Tacazzè, which he calls the Nile, and to have penetrated into Gojam,

[88] Pliny, lib. vi. c. 24. Adúliton oppidum Ægyptiorum; hoc ſervi a dominis profugi condiderunt.

[89] All theſe are noticed by Bruce, and the form of the obeliſk delineated: they are mentioned alſo by Lobo, p. 201. Fr. ed. Obeliſks alſo and pyramids appear in the picture of Adûli, drawn by Coſmas on the ſpot, anno Chriſti 532. See Chiſhull Antiq. Aſiaticæ, in Marmore Ad Ilrano. See Diſſertation, No. ii.

[90] Though he is called Indicopleuſtes, I can hardly give him credit for having ever ſailed on the Indian ocean. His deſcription of Ceylon has obtained this title for him. But he ſays himſelf, he had it from Sopater. And his account of the ſea beyond the ſtraits of Bab-el-mandeb may well make us think he never paſſed them.

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the very province where the fountains of the Nile are found; the Agows are mentioned by name, and other appellations ſeem to imply the kingdoms of Tigrè [90], Bizamo, and Begemder, the country of Geez, with the mountains Samen and Lamalmon. The ſnow mentioned on thoſe tracts is diſclaimed by Bruce [91]. But what phenomena were natural to the country in ſo diſtant an age, it is hard to determine. What is added, that Ptolemy Euergetes made roads or opened a communication by land between this country and Egypt, is the moſt remarkable particular of the whole, becauſe this method of intercourſe ſeems wholly obliterated, as far as may be judged by ſubſequent writers. And Agatharchides does not appear to be acquainted, either with the expedition of a ſovereign of his own country, not fifty years deceaſed, nor with the country, or its port Adûli [92]. His account goes no farther down the coaſt than Ptolemáis; and even there is not without a mixture of the marvellous.

This, however, is but a negative proof, and not ſufficient to invalidate an exiſting inſcription, if Coſmas is worthy of belief; and to his credit be it mentioned, that Bruce [93] found the name EUERGETES, ſtill viſible on a ſtone at Axúm, which ſerves as a footſtool to the throne on which the kings of Abyſſinia are crowned at this day.

[90] See Diſſertation ii.

[91] Vol. ii. p. 296. Bruce ſays, there is no word in the language to expreſs ſnow or ice. But Horace ſays, Soracte ſtat nive candida, a circumſtance which now never occurs, as *I think*, Addiſon ſays.

[92] See Appendix, Adûlitic marble, No. ii.

[93] Bruce writes, "The inſcription though much defaced, may ſafely be reſtored." ΠΤΟΛΕΜΑΙΟΥ ΕΥΕΡΓΕΤΟΥ ΒΑΣΙΛΕΩΣ. How much more authentic would a fac ſimile of the inſcription have been, than the reſtoration? in which, by an error of the author, or the preſs, EVERΓETOY, is read for EYEPΓETOY, vol. iii. p. 132.

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On this evidence there is little reaſon to doubt the expedition of Ptolemy to this country; and however the port of Adûli might be forgotten or abandoned in the time of Agatharchides, it became again conſpicuous, as the trade increaſed in the Red Sea; or at leaſt as it was conducted under the protection of the Roman power in Egypt.

This intercourſe will ſufficiently account for the character which the Periplûs gives to Zôſkales [94], the civilized ſtate of his manners, and his knowledge of the Greek language. And it is plain that this country was juſt beginning to be known again, as Pliny mentions Adûli only without any notice of Axûma; and Strabo, who preceded him, makes no mention of either. The manners of theſe tribes he derives chiefly from Agatharchides, with the addition of ſome peculiarities [95]; but with the commerce of the coaſt, and the kingdom of Abyſſinia, he was unacquainted, though he accompanied Elius Gallus to Syênè. That journey of Gallus was preparatory to the opening of the trade meditated by the Romans, from their firſt entrance into the country; the author of the Periplûs [96] writes as if it had been opened previous to his own time, and with every apparent evidence, that he had traded to Adûli himſelf. The aſſortment of his cargo is as ſpecific as a modern invoice.

[94] So and Suah, according to Bruce, are roots, implying the Shepherd tribes on this coaſt. Thus Ma-ſuah is the port of the Shepherds. Could he not have found *So* in Zôſkales the king of the Shepherds?

[95] Ἀπὸ γυναικείας Ἰουδαικῶς ἱστορημένας, p. 771.

[96] If the Adûlitic inſcription is verified, it is the firſt authentic account of Abyſſinia. But the knowledge of it was loſt, and the Periplûs is the firſt work extant, which expreſsly notices Adûli, Axûma, and the commerce of the country.

EXPORTS.

EXPORTS.

Ἐλέφας.	Ivory.
Ῥινοκέρως.	Horns of the Rhinoceros.

IMPORTS.

Ἱμάτια βαρβαρικὰ ἄγναφα τὰ ἐν Αἰγύπτῳ γινόμενα[97].	Cloth with the knap on, of Egyptian manufacture, for the Barbarian market.
Στολαὶ Ἀρσινοητικαὶ.	Robes made up, the manufacture of Arsínoè or Suez.
Ἄβολοι νόθοι χρωμάτινοι.	Single cloths dyed, in imitation of thoſe of a ſuperior quality.
Λέντια.	Linnen, ſuppoſed to be from the Latin Linteum.
Διπρόσσια.	Cloth, ſtriped or fringed.
Λιθία Ὑαλῆ.	Glaſs or Chryſtal.
Μυῤῥινὴ[98].	Porcelaine, made up at Dioſpolis in Egypt, in imitation of Oriental.

[97] Bruce has ſhewn, that Barbarick, Barbarine, and Berberin, are names derived from Berber or Barbar, the native name of the coaſt of the Troglodities, Ichthyophagi, and Shepherds. It goes down the whole weſtern coaſt of the Red Sea. The Egyptians hated and feared them. It was, therefore, in Egypt a term both of dread and contumely, in which ſenſe it paſſed to the Greeks, and from them to the Romans.

[98] Salmaſius everywhere reads Μοῤῥινὴ, which he ſuppoſes to be Oriental porcelain; if ſo, the manufacturers of Dioſpolis are the Prototype of the European imitators. But there is much controverſy upon this ſubject, what the Morrhina really was.

Ὀρείχαλκος.	White Copper, for ornaments and for coin.
Μελίεφθα χαλκὰ.	Braſs, for culinary veſſels, for bracelets, and ornaments of the legs, ſtill worn in Abyſſinia. See Bruce, iii. 54.
Σίδηρος.	Iron, for ſpear heads to hunt the elephants, &c. and for weapons of all ſorts.
Πελύκια.	Hatchets.
Σκέπαρνα.	Adzes.
Μάχαιραι.	Knives, daggers, or kanjars.
Ποτήρια χαλκὰ στρογγύλα μεγάλα.	Drinking veſſels of braſs, large and round.
Δηνάριον.	Denarii, ſpecie for the uſe of ſtrangers, *Roman* coin. If *Greek*, it would have been Δράχμαι, drachms.
Οἶνος. Λαοδικηνὸς, καὶ Ἰταλικὸς.	Wine, Laodicean, i. e. Syrian, and Italian.
Ἔλαιον δὲ πολύ.	Oil, but in no great quantity.
Χρυσώματα.	Gold plate. } According to the faſhion of the country, and as preſents, or for the uſe of the king.
Ἀργυρώματα.	Silver plate. }

Ἀβόλλαι.	Watch coats, camp cloaks.
Καυνάκαι ἁπλοῖ.	Coverlids, plain.
οὐ πολλῶ.	of no great value.
οὐ πολλαὶ.	not many.
Σίδηρος Ινδικὸς.	Iron, of Indian temper or manufacture.
Ὀθόνιον Ινδικὸν τὸ πλατύτερον ἡ λεγομένη μοναχῆ.	Indian cottons, wide and plain, perhaps blue Surat cottons, ſtill common in Abyſſinia. Bruce, vol. iii. p. 62.
Σαγμοτογῆναι, or Σαγματογῖναι.	Cottons or Muſlins, in parcels.
Περιζώματα.	Saſhes, ſtill an article in great requeſt.
Καυνάκαι.	Coverlids.
Μολόχινα.	Cotton, of the colour of the mallows flower.
Σινδόνες, ὀλίγαι.	Muſlins, in no great quantity.
Λάκκος, χρωμάτινος.	Gum lack, but Salmaſius thinks it the colour of a cloth or cotton. Plin. Ex. 816.

Theſe are the principal articles imported from Egypt into Adúli. The voyage may be made any time from January to September[98], but

[98] The author expreſſes himſelf both in Latin terms and Egyptian. From January to September, that is, from Tybi to Thoth, otherwiſe one muſt have ſuppoſed an error; for according to Bruce and the charts, the regular wind blows up the gulph from November to April. Perhaps there are means of coming down from Berenícè or Ptolemáis, with land breezes?

but the beſt ſeaſon is September, and this is conſiſtent with the modern account of the winds in this ſea.

Oppoſite to the Bay of Adûli[99] lie many low and ſandy iſlands called Alalaiou[100], anſwering preciſely to the appendages of Dahalac as deſcribed by Bruce, and exhibiting, ſeemingly, the elements of the modern name; for Dahal ſignifies an iſland, in the language of Geez. Hither, according to the Periplûs, Tortoiſe-ſhell was brought by the Ichthyóphagi; and it is very remarkable that Bruce ſhould obſerve the beauty of the tortoiſe-ſhell here[101], to be ſo exquiſite that it is a very profitable article of trade with China and the Indies. Thoſe who know the Roman taſte for ornamenting doors, tables, couches, beds, &c. with this ſhell, will not wonder at its value in the commerce of the ancients.

Below Adûli, about eight hundred ſtadia, or eighty miles, there is a deep bay with a vaſt accumulation of ſand, in which is found the Opſian ſtone, that is no where elſe to be met with. Salmaſius has proved that the title of Opſidian or Obſidian given to this foſſil from an unknown Obſidius, is an error. He deſcribes it as a dark green which will take a very high poliſh, and for which reaſon it is ſaid to have been ſelected by Domitian to veneer a portico at an enormous expence, that it might by reflection ſhew if any one was approaching behind his back, and preſerve him from the attack of an aſſaſſin. There are ſpecimens in England of what the modern Italian artiſts call Opſian ſtone; its texture is cloſe enough to admit

[99] *On the right*, according to the text, but to make this true you muſt ſuppoſe the writer at Adûli, fronting the ſea, with his face to the eaſt.

[100] Pliny reads Aliæn, lib. vi. c. 34.

[101] Caught between Dahalac and Suakem, but he adds, on low ſandy iſles laid down between 18° and 20°, where, on his map, he hardly has a ſingle iſle.

of any polith[102], but it is ſo dark that the green tinge can only be diſcovered in a particular light.

The bay where it is found is much harder to diſcover than the ſtone itſelf[103]. There is nothing like a bay till we come to Beilul, much too diſtant, and there are no data to guide us but the diſtance. It is here that the authority of Zoſkales ſeems to terminate; and if Bruce had been able to give us the exact limit between the province of the Bahrnagaſh and the kingdom of Adel, it is poſſible that this might have determined the queſtion.

From this bay the coaſt of the gulph, we are informed, has a more eaſterly direction to the ſtraits: a circumſtance agreeing with the maps of Ptolemy, the report of Agatharchides, and the opinion of the age. This gives the ſituation of the Bay, both in regard to Adûli and the ſtraits.

The ſtraits of Bab-el-mandeb, or Mandel, which is interpreted the gate of affliction, are in all reſpects worthy of conſideration. They, for many ages, formed the barrier unpaſſed by Europeans; and from the time this barrier was forced, the knowledge of India and the countries beyond it has been on the increaſe to the preſent hour. I ſpeak of Europeans, becauſe I am ready to admit an intercourſe between the ſouthern coaſt of Arabia and Malabar, as early as the moſt ſpeculative antiquary can require. I acknowledge all that can be attributed to the voyages of Solomon's fleet, as long as they are confined to the coaſt of Africa. I accede to the progreſs of Timoſthenes down the ſame coaſt, perhaps, as far as Madagaſcar, notwithſtanding the inconſiſtency of his accounts[104]. And I allow

[102] I have ſeen this ſtone both rough and in its poliſhed ſtate.

[103] Hinc in ora Æthiopiæ, ſinus incognitus, quod admittimur cùm mercatores ulteriora ſcrutentur. Pliny, vi. 34. For Beilul, ſee the Modern Univerſal Hiſtory, vol xii. p. 301. where the ports of Vella and Leila are mentioned, which, if they had been carried beyond the ſtraits, might have been the Sinus Avalites.

[104] See Pliny, lib. vi.

the

the Phenicians to have penetrated as far as Herodotus ſhall pleaſe to carry them, if he will not conduct them round the Cape of Good Hope. But whatever diſcoveries we attribute to the Oriental navigators, there is no hiſtorical evidence remaining, that the Greeks in Egypt proſecuted theſe diſcoveries ſo as to make them the baſis of a ſettled trade: they contented themſelves with fetching the produce of India and Africa from Yemen; if they did paſs[105] the ſtraits by accident or deſign, it was under ſuch an impreſſion of terror, that every thing beyond them was obſcured by fable, the ſun was a pillar[106], and the ſea a curd.

Much that the three firſt Ptolemies had attempted, was neglected, or forgotten by their profligate and oppreſſive ſucceſſors; and if the Romans had not taken poſſeſſion of Egypt, a ſhort ſucceſſion of weak and ignorant princes might have reduced this commerce again into the ſame torpid ſtate, it has experienced under the Mammeluks or the Turks. The dread of venturing on the ocean is expreſſed by many writers long after the trade to India was eſtabliſhed; and Coſmas, in the reign of Juſtin, ſpeaks of paſſing the ſtraits as wildly as Pytheas does of the Arctic ocean.

As this ſpecies of the marvellous is a conſtant attendant upon ignorance[107], and an indication that the writer deſcribes what he never ſaw; ſo is a plain narrative an evidence of truth, and the abſence of prodigies one of the ſtrongeſt proofs that the author really viſited the country he deſcribes.

[105] It has been noticed in the firſt book, diſcovery of Hippalus will be ſhewn at large in the third book.

how far their knowledge extended in the time of Agatharchides; he ſays, the Arabians traded to India, and Indian ſhips arrived at Arabia, without mention of the Greeks. How the Greeks afterwards reached India before the

[106] Agatharchides.

[107] Compare the account in the Periplus no lower than Ptolemais Theron with the account of the ſame coaſt in Agatharchides.

It

It is from internal evidence of this ſort that I conclude the author of the Periplus to have been himſelf a trader on the coaſt of Africa and Malabar. Concerning both he ſpeaks with the temperate language of one who deſcribes objects that are familiar; and the extravagance, ſuch as he has, commences not till he paſſes Cape Comorin.

In running down the coaſt from Adûli to the ſtraits, we have no mention of any place but the bay where the Opſian ſtone is found, upon an extent of near four hundred miles. The author conducts us at once to Avalitès, which lay immediately beyond the neck of the ſtraits; and from the time we leave Ptolemáis Thêrôn moſt of the appellations are native, without reference to the reigning family of Egypt, or to the Greek language,[108] for their origin.

The reaſon of this does not appear, as Strabo, Juba, Pliny, and Ptolemy, all place Arſinoè and Berenícè Epidîres in this tract, with ſlight traces of other Greek names, as Eúmenes and Antíochus[109]. If they exiſted, it is ſtrange that a Greek ſhould have paſſed them unnoticed, neither does it appear that they are concealed under the native names which Ptolemy reports, in the ſame manner as our author[110].

[108] Orinè, Daphnon, Apokopi are Greek names, but given from circumſtances, and perhaps by the firſt navigator, as Cook named his new diſcoveries.

[109] Strabo, p. 771. Ptol p. 112.

[110] Δειρη, collum, and ſo Βερενίκη ἐπὶ δειρῆς, written indeed Δείρη in Ptolemy, and by a ſtrange miſtake in Bruce written and interpreted Diræ or the Furies from the Latin.

CHART of COAST of AFRICA from the Red Sea to the Cape of Good Hope.

20° 30° 40° 50°

10°

0

10°

20°

30°

ARABIA

Mocha

Avalites

Malao

Moondus

Barbora

Magellon

Mete

Nilo

Ptolemeon

Pedra

Daphnon Mag.

Elephant Bo.

C. Felles

Aromata Pro.

Cenalidi

Tabai Prom.

Daffuli Cape

Opone

Morro Gobo

Zengisa or M.Phalangis of Ptolemy

Jubo

APOKOPA

Southern Horn

Barnes

Magadoxo

Bouba R.

NB on this Coast Seven Rivers are noticed by Resende commencing from the North.

Bouba	1
Jugo	2
Manne	3
Quiama	4
Punta de Ragoma	5
Patte	6
Mandaro	7

Great River Quilimanxe or Obi

Country of Zanguebar or Cafres

Pate Ampaga

Lamo &c

Pyralaan Isl.ds at the Mouth of the Quilimanxe

Melinda

Mombaza or the New Canal of the Periplus

Pemba

Zanguebar

Quiloa

Geavo R.

Mentuthias Mountn

RHAPTA the limit of the navigation in the Periplus fixed by the Coast of Seven Rivers & Mountn

C. Delgado

Comoro or Isl.ds of the Moon

Hinzuana or Johanna

From this lake Di Barros derives the Zambeze the Spirito Santo & another River which flows into the Atlantick & here perhaps the Arabians & Ptolemy suppose the lakes from which issues the Nile

Lake Maravi or d'Aroulle

Mozambique

Prasum of Ptolemy by the Latitude

River of good signs Quilimane Zambeze R.

Kingdom of Benomotapa or Monomotapa

Rivers Quame

Ophir of Bruce Le Grande &c

Sofala

Maroui R. Spirito Santo

C. Corrientes Currents

Bay of Laurence or of Spirito Santo

Cape St. Andrew

Madagascar COMR or Island of the Moon of the Arabians

NATAL TERRA

Port Natal

Delagoa

L.e de la Grue

S. Helena Bay

Saldanha

Cape of Good Hope

False Bay

C. Agulhas

St. Blaze

Published according to Act of Parliament May 1st 1800 by D.r Vincent

J. Walker Sculp.

DEIRÈ.

VI. We are now to paſs the celebrated ſtraits of Bab-el-Mandeb, a name which is ſometimes thought to be figured in the Mandaeth of Ptolemy. But Mandaeth he ſtyles a village, and places it forty minutes north of the ſtraits [111]. The ſtraits he calls Deirè [112], or the Neck. The Periplûs makes no mention of Deirè, but obſerves that the point of contraction is cloſe to Abalites, or the Abalitick mart; it is from this mart that the coaſt of Africa, falling down firſt to the ſouth, and curving afterwards towards the caſt, is ſtyled the Bay of Avalites by Ptolemy, anſwering to the modern Bay of Zeila; the country from the ſtraits to Cape Gardefan or Aromata is the kingdom of Adel; and in the modern Adel we may perhaps trace a reſemblance to the ancient Abal-ites [113]. However this may be, the Portugueſe, upon their firſt intercourſe with Abyſſinia, found Adel a powerful kingdom in the hands of a Mahometan race of ſovereigns, the determined enemies of the Chriſtian name, and the ravagers of Abyſſinia, almoſt to its deſtruction. Againſt theſe invaders, and againſt the oppreſſion of Gragni [114], the moſt ferocious and the moſt ſucceſsful of all thoſe Mahometan tyrants, it was, that the Abyſſinians ſollicited the aſſiſtance of the Portugueſe. Albuquerque, the brother of the illuſtrious general of that name,

[111] Μανδαηβ κώμη ιγ΄ it ought to be written ι γ΄ ſeparate, 10 ½ = 10° 20′.

[112] Δηρη, ιχ, Déir 11°.

[113] It appears that this, at leaſt, is the opinion of Marmol, lib. x. p. 158. Bruce imagines Adûli to bear relation to Adel, and if the kingdom of Adel ever extended north of the ſtraits to Adûli this would be admiſſible. In the Periplûs, Adûli is certainly connected, not with Adel, but with Axûm. I am not certain that Bruce knew the ſite of Adûli.

[114] Anno 1564.

was ſent to command the troops appointed to this ſervice, in which expedition he and moſt of his followers periſhed. But the knowledge which the Portugueſe obtained by that intercouſe, and the wars in which they were engaged, on the coaſt of Arabia, with the Turks and Arabs, furniſh the principal means that we have for explaining the topography of the country before us"[5]. The Engliſh who ſtill frequent the Red Sea, ſeldom viſit the ports of Adel, as the ſtate of the country preſents little temptation to the ſpeculations of commerce. But when the Portugueſe firſt entered theſe ſeas, Adel, though a barbarous was ſtill a powerful government"[6], gold duſt, ivory, myrrh, and Abyſſinian ſlaves"[7] formed the ſtaple of its native commerce, the ſpices and muſlins of India were ſtill found in its ports, and notwithſtanding the depredations of a ſavage war, caravans"[8] were protected, which arrived regularly from Abyſſinia, and the interior of Africa more to the ſouthward. Theſe circumſtances will contribute more to illuſtrate the narrative of the Periplûs than any particulars which can be collected from ancient authors; the Portugueſe found the country and the commerce in the ſame ſtate as the Greeks deſcribed it fifteen hundred years before, Arabs

[115] Marmol in this part of his work copies Di Barros. Di Barros's account we have in Ramuſio, theſe with Oſorius and Faria are the authorities referred to.

[116] In the voyage of the two Arabs, publiſhed by Renaudot, the trade of Zeyla is noticed, in leopard's ſkins, amber, tortoiſe ſhell.

[117] Abyſſinian ſlaves are in high eſtimation in Turky, Arabia, and India; they are docile, tractable, intelligent, and endued with talents and courage which always elevate them to favour, and often to command. When commodore Robinſon ſurveyed the coaſt of Brodia in 1772, an Abyſſinian was maſter of Scindi. How different is this ſingular race from the Caffres on the coaſt in their neighbourhood!

[118] See Corſali in Ramuſio, vol. i. p. 187. Purchas, vol. i. p. 754.

mixed

mixed with the natives, the ſame productions and commodities, the ſame intercourſe with Hadramaut and the coaſt of Malabar. This ſtate of things ceaſed, in ſome degree, with the arrival of the Europeans in India. But as long as the Indian trade was carried on by the Red Sea, the kingdom of Adel muſt have partaken in it, and its commerce would be ſimilar to the Moſyllitick commerce of the ancients. This trade was ſingular; for, as far as can be collected from the authorities which remain, it appears, that in the age of Agatharchides, the Greeks of Egypt went no farther than Sabêa or Yemen, to fetch the commodities of India; that they afterwards paſſed the ſtraits, and found a better market in the port of Moſyllon [119], one of the harbours of Adel; that in a later period they advanced as far as Hadramaut, on the ſouthern coaſt of Arabia; and that all theſe efforts were made for obtaining the productions of India, till at laſt they reached that country themſelves, firſt by adhering to the coaſt, and finally by ſtriking acroſs the ocean in conſequence of the diſcovery of the monſoon by Hippalus.

The coaſt of Adel, ſtyled Barbaria [120] in the Periplûs, commences at the ſtraits and terminates at Arômata; in which there can be little doubt, that the author is more accurate than Ptolemy, who extends the name of Barbaria down the coaſt of Ajan, the Azánia of the Periplûs. Barbaria is much more properly extended to the north than the ſouth; for the Troglodytes on the weſtern coaſt of the Red Sea are the original Barbars or Berberines, as Bruce has admirably proved, the perpetual enemies of Egypt, whence their name became a term of odium and diſtinction, and in this ſenſe paſſed both to

[119] Hence many Indian commodities were called Moſyllitick in the market of Alexandria, cinnâmon, ſpices, muſlins, &c.

[120] See Herodotus, lib. II. c. 158. Allwood, 64.

the Greeks and Romans, as an appellation adopted for every thing that was foreign, or contrary and offenfive to their own fyftem of life and manners.

The coaft of Barbaria is eftimated at four thoufand ftadia [121] in the Periplus, and is in reality four hundred and fifty geographical miles, without taking its finuofities into the account. The ftraits at Bab-el-Mandeb are contracted to three and twenty miles, a fpace divided into two channels by the intervention of Perim and other iſles, both of which were navigated by the ancients, according to their courfe down the oppofite fides of the Red Sea; from the ftraits, the channel opens in an eaſterly direction to Cana or Cape Fartaque on the Arabian fide, and to Arômata or Gardefan on the coaft of Africa. Thefe two promontories form the proper entrance to the ſtraits from the Indian Ocean, and are about two hundred and fifty geographical miles afunder. The latitude [122] of Fartaque is 15° 45′ 0″, and that of Gardefan 12° 0′ 0″.

The African fide of this channel, which we are now to follow, contains, according to the Periplûs, four principal marts or anchorages, called by the general name of Ta-pera [123]; and the fame number occur in the accounts of the Portugueſe, but all attempts to make them correſpond are in vain. D'Anville has placed them

[121] Certainly more are intended by the Periplûs but not ſpecified. Four thouſand ſtadia are four hundred Roman miles.

[122] This is laid down from one of the lateſt charts, by Laurie and Whittle; but in theſe latitudes and the ſpace between Fartaque and Gardefan, the charts differ greatly.

[123] Whether we are to read Τὰ πηρὰ, or Τὰ πέρα, is very juſtly doubted by the commentators. I incline ſtrongly to the former. The marts *beyond* the ſtraits, in contradiſtinction to thoſe within; properly τὰ πέραν, or πέρα. And this ſeems fully confirmed by the Periplûs itſelf, p. 8. where the MS has τὸ πέρεχν and τὸ πέρα, which Hudſon very properly writes τὰ πέραν, or τὰ πέρα, becauſe joined with ταῦτα and τὰ αὐτὰ.

according to the meaſures of the Periplûs. My own wiſh was to have reconciled Moſyllon with the modern Zeyla; firſt, upon account of a reſemblance in the ſound of the names; and ſecondly, becauſe Zeyla is the principal mart of the moderns, as Moſyllon [124] was of the ancients. But this endeavour is favoured neither by the meaſures or the circumſtances deſcribed. The leading facts upon which the following arrangement is founded, will be ſtated in their proper place; they amount, at beſt, only to conjecture; but this is of leſs importance, as they terminate in certainty at Arômata, with ſuch ſtriking peculiarities as can be derived only from one who had actually viſiſted the coaſt himſelf.

ABALITES, AUALEITES, pronounced AVALITES, whether written with the B or the U.

VII. The firſt of theſe marts is Abalites, a road, but not a port or harbour; the goods are conveyed to and from the ſhips in boats or rafts [125]. This place, according to the Periplûs, is cloſe to the Straits of Bab-el-Mandeb, but Ptolemy has fixed it at the diſtance of fifty or ſixty miles, and makes it give name to the whole Bay of Zeyla, which is ſtyled the Bay of Moſyllon by Pliny. There is a Ras Bel [126] in the charts which is not more than ten geographical miles from the ſtraits; but whether the reſemblance of the names marks any relation, is juſtly to be doubted.

[124] Marmol ſpeaks of many ancient buildings at Zeyla, but *ancient* may refer to Arabians of a much later date than the age of the Periplûs, lib. 10. p. 155. et ſeq. French ed.

[125] Strabo notices the transferring the cargoes at the ſtraits from ſhips to boats. May it not be an error derived from the practice here mentioned?

[126] Marmol is fully convinced that Abalites is the kingdom of Adel, lib. x. p. 155, 156.

The imports of this place are:

Ὑαλῆ λιθία σύμμικτος.	Flint glaſs of various ſorts.
Διοσπολιτικὴ ὄμφαξ.	Unripe grapes from Dioſpolis, or, perhaps, vinegar. See Heſych. Stuckius ſuppoſes it may be any unripe fruit; and Ramuſio ſuppoſes it to be a ſpecies of ſtone.
Ἱμάτια βαρβαρικὰ σύμμικτα γεγναμμένα.	Cloths for the Barbarine coaſt, of various ſorts, with the knap on.
Σῖτος.	Corn.
Οἶνος.	Wine.
Κασσίτερος ὀλίγος [127].	Tin in ſmall quantity.

The exports are conveyed by the natives in ſmall craft to Kelis [Okélis,] and Mooſa, on the coaſt of Arabia, conſiſting of

Ἀρώματα.	Gums, odoriferous gums.
Ἐλέφας ὀλίγος.	Ivory in ſmall quantity.
Χελώνη.	Tortoiſe-ſhell.
Σμύρνα ἐλαχίστη διαφέρουσα δὲ τῆς ἄλλης.	Myrrh in very ſmall quantity but of the fineſt ſort.

[127] The tin of Britain we thus find on the coaſt of Africa. May we not juſtly ſuppoſe, that the Africans knew as little of Britain as the Britons of Africa? Yet here we ſee the medium through which the commodity was conveyed. How many commodities paſſed from regions equally diſtant, without any knowledge of the medium? before any knowledge exiſted?

Particular

Particular attention is due to this laſt article, becauſe the myrrh of Arabia is celebrated by every poet and hiſtorian, while Bruce ſays, it is not properly a native of that country, nor does it come to perfection there. Its origin, he affirms, is from Azam in Africa. The Periplûs is perfectly in harmony with this aſſertion. It mentions the myrrh of this coaſt as the fineſt of its kind; it ſpecifies the means of conveying it to Yemen or Sabêa; there the firſt Greek navigators found it, and through their means it found its way into Europe, under the name of Sabêan.

One other remark of the Periplûs, that the natives of Avalites are uncivilized, and under little reſtraint, is worth noticing, becauſe it is in correſpondence with all the modern accounts we have, which deſcribe the natives as treacherous beyond meaſure, a quality, perhaps, not mitigated by the introduction of Arabs among them, or the religion of Mahomet, but aggravated by inſtruction, and pointed by ſuperſtition.

We have now four thouſand ſtadia to diſpoſe of, eight hundred to Malao, and a thouſand, or two days ſail each, are allotted to Mundus, to Moſyllon, and Nilo-Ptoleméon. In the diſtribution of theſe d'Anville has acted wiſely in conſidering the diſtances only; and though I differ from him in the following arrangement, upon the ſtrength of one particular, which is the mention of directing the courſe eaſt from Mundus, it is not without diffidence in my own aſſumption.

MALAÔ.

VIII. EIGHT hundred ſtadia, or eighty miles to Malaô, is more than ſufficient to carry the poſition of this place to Zeyla; but the deſcription given can hardly be conſiſtent with the ſituation of that town in a bay; the anchorage[128] is marked as a road upon an open ſhore, with ſome protection from a promontory on the eaſt. A protection on the eaſt is more applicable to a coaſt that lies eaſt and weſt, but an open road is hardly conſiſtent with a bay[129] like that of Zeyla; and the ſecurity of the following anchorage ſeems to claim that privilege for Mundus. The natives of Malaô are deſcribed of a more peaceable diſpoſition than their neighbours, and the imports are ſuch as have been already ſpecified, with the addition of

Χιτῶνες.	Jackets.
Σάγοι Ἀρσινοητικοὶ γεγναμμένοι καὶ βεβαμμένοι.	Cloaks or blanketing, manufactured at Arſinoe or Suez, with the knap on and dyed.
Μελίεφθα ὀλίγα.	Braſs or copper prepared to imitate gold.
Σίδηρος.	Iron.
Δηνάριον δὲ πολὺ χρυσοῦν καὶ ἀργυροῦν.	Specie, gold, and ſilver, but in no great quantity.

[128] Ὅρμος ἀπίστολος, an open road. Stuckius mentions Mergeo as its repreſentative, from Belleforeſt.

[129] The whole curvature of the S. W. angle is called the bay of Zeyla, but Zeyla itſelf lies in an inner bay or harbour.

The

The exports are

Σμύρνα.	Myrrh.
Λίβανος ὁ περατικὸς [130] ὀλίγος.	Frankincenſe, thus, or olibanum of Adel.
Κασσία σκληροτέρα.	Cinnamon, caſſia lignea.
Δέκκα, Κιττὰ, Δάκας.	Cinnamon of inferior ſorts.
Κάγκαμος.	The gum cancamus.
Μάκεις.	Tila, ſeſamum, carried to Arabia, but ſee Plin, xii. 8. who calls it an aromatick from India, the bark red, the root large. The bark uſed in dyſenteries.
Σώματα σπανίως.	Slaves, a few.

We have in this liſt the firſt mention of kaſſia, caſia, or cinnamon. It is all of the inferior ſort, ſuch as the coaſt of Africa always has produced, and produces ſtill; of little value in any market, where it comes in competition with the cinnamon of Ceylon, but grateful to the natives, readily purchaſed by thoſe who cannot obtain the Oriental, and ſtill ſaleable for the purpoſes of adulteration. How old this traffick was is not eaſy to be determined, but if the ſhips from Egypt did not paſs the ſtraits when Agatharchides wrote, they certainly reached this coaſt in the time of Artemidorus, as we learn

[130] Περατικὸς muſt be interpreted according to its reference; if it applies to the port itſelf it is to be rendered *foreign, not native.* But it may be a mercantile term, by which the commodity was known at Alexandria, and then Λίβανος ὁ περατικὸς will be the *frankincenſe* which comes from the ports *beyond* the ſtraits, τὰ πέραν. See Perip. p. 8.

learn from Strabo, who mentions the baſtard cinnamon, perhaps the ſame as the caſia lignea, or hard cinnamon; he adds alſo, that the cargoes were transferred from the ſhips to boats at the ſtraits, a proof that this commerce was in its infancy, lib. xvi. p. 768. 774. Slaves are noticed here as an article of commerce, a circumſtance common to both the coaſts of Africa in all ages; in the preſent inſtance it requires no great ſtretch of imagination to ſuppoſe that the ancient traffick of Adel was parallel to the modern, and that the ſlaves procured here would conſiſt of both Cafrés and Abyſſinians; according as the courſe of war or the plunder of individuals ſupplied the market, both for home conſumption and exportation.

MOUNDUS[131], pronounced MOONDUS.

IX. The next anchorage we are directed to, is Mundus, at the diſtance of two days ſail, or a thouſand ſtadia: D'Anville fixes it at Barbora; in which he is juſtified by the meaſures. If I neglect the meaſures, it is with regret, but there are circumſtances mentioned, which induce me to fix Mundus at Zeyla, or at an iſland previous, called Londi, by de la Rochette, and Delaqua by the Portugueſe, for Malaô and Mundus, in Ptolemy[132], differ not in longitude; and his Moſyllon is a promontory which may be Barbora, but ſuits

[131] Ἐμπόριον ἡ Μόνδα. The true ſound is Moondus, and whether the author means to give the native ſound, both in this Moondus and in Paleſimoondus, (Ceylon,) or whether it is a corruption of the text, may be doubted. But the uſage is uniform, and therefore ſeems to be deſign rather than accident. Moondus has a more Oriental form than Mundus; and as both this place and Ceylon were poſſibly ſo named by the Arabians who traded to both, it is natural to look to the Arabick for its meaning. See Peripl. p. 6.

[132] Μάλεως ἐμπόριον οη. ϛγ. Maleôs, a mart, long. 78°. lat. 6° 30′. Μόνδα ἐμπόριον οη ζ, Mundú, a mart, long. 78°. lat. 7°. However erroneous theſe latitudes may be, their mutual relation has a conſiderable degree of weight.

neither

neither of the other two. Another conſideration is, that the Periplûs, though it does not actually aſſert that the direction of the courſe to the eaſt commences at Mundus, yet mentions it here for the firſt time: this is true, if Mundus be fixed at Zeyla, and this circumſtance is the particular inducement for preferring it. The ſafety of the anchorage here at an iſland, or under the protection of an iſland, is marked with preciſion; and if there be an iſland at Zeyla, the whole evidence is conſiſtent. Bruce[133] mentions the iſle of Zeyla; but I have found no other authority; and if he is miſtaken, Mundus muſt be carried back to Delaqua. But upon the authorities alleged, Malaô may be well fixed at Delaqua, and Mundus at Zeyla.

The native traders, at this port, are deſcribed as an uncivilized tribe[134], and the imports and exports ſimilar to thoſe of the preceding ports, with the addition of mokroton, a fragrant[135] gum, the more peculiar commodity of the place.

MOSULLON, written MÓSSYLON by Pliny, MÓSYLON by Ptolemy.

X. At the diſtance of two or three days' ſail, or from an hundred to an hundred and fifty miles, we are conducted to Moſyllon, the grand mart of the ancients on this coaſt, the place which gave name to their trade and to the whole bay, in preference to Abalites, in the eſtimation of Pliny. The diſtance from Zeyla to Barbora is ſtated at eighty miles by Oſorius[136], a circumſtance not unfavourable to the two

[133] Vol. ii. p. 142.
[134] Σκληρότεροι, duriores.
[135] Θυμίαμα, incenſe.
[136] Oſorius, vol. ii. p. 229. Marmol, lib. x. p. 156, makes it only eighteen leagues.

days' ſail of the Periplûs, which, in ordinary computation, are equal to an hundred miles, and which will bear contraction or extenſion according to the currents or the winds.

The character of Moſyllon [137] is omitted in the Periplûs, but in Ptolemy it is twice [138] ſpecified as a promontory, and by his latitude it is carried up a whole degree more to the north than Mundus. This projection is doubtleſs too extenſive, but the feature is true, and ſuits no other point on the whole coaſt but Barbora, for Barbora [139] is a town upon an iſland [140] cloſe to the ſhore, adjoining to a narrow cape of conſiderable extent, which is open, low, and ſandy. Its want of height prevents it from affording protection againſt the N. E. monſoon, and this may be the reaſon why the Periplûs calls it a bad road. D'Anville has carried Moſyllon another ſtep towards the eaſt, to a river where he finds the name of Soel [141], and which he ſuppoſes related to Moſyllon; but the Periplûs requires more rivers than we can diſcover at preſent, and this ſtream may well be preſerved for Nilo-Ptoleméon, an appellation in which undoubtedly a river is implied.

But there is a ſtill greater probability implied in the very name of Barbora, which is written Borbora, Barbara, and Berbera by

[137] It is remarkable that Juba makes the Atlantick Ocean commence at Moſyllon; by which we are to underſtand that he conſidered the whole ocean which ſurrounded Africa as commencing at Moſyllon and terminating at Mount Atlas. See Pliny, lib. vi. c. 29. Stuckius in loco. See alſo Gronovius's map for P. Mela.

[138] Μόσυλον ἄκρον καὶ ἐμπόριον, ή, i. e. 8°. p. 112. Μόσυλον δὲ ὑπὲρ τὸ ομώνυμον ΑΚΡΟΝ. p. 113.

[139] Corſali in Ramuſio, vol. i. p. 187. The Univerſal Hiſtory mentions a river at Barbora called Howacha, vol. xii. p. 307. which Ludolfus ſays is the river of the capital Aucugarecèc. Marmol ſuppoſes Barbora to be Moſyllon, vol. iii. p. 156.

[140] This iſland is called Londi in ſome charts; de la Rochette applies Londi to what others ſtyle Delaqua. See Univ. Hiſt. vol. xii. p. 307.

[141] The Univerſal Hiſtory mentions Salim, and ſuppoſes it to be Moſyllon.

the moderns, retaining ſtill the title of Barbaria, attributed to this coaſt by the ancients; and as d'Anville has obſerved, that the name of the province became applied to the capital in many European cities[142], ſo have we in this part of the eaſt, the town of Arabia Felix, ſo named from the province, and the ſame place afterwards called Aden from the country Adanè. It is probable, therefore, that Barbaria became applicable to Barbara, the principal mart on the coaſt; and if this be admitted, it gives great weight to the ſuppoſition that Barbora and Moſyllon are the ſame. The Moſyllitick coaſt and Barbarick coaſt were ſynonymous.

The imports at Moſyllon are the ſame as have been already ſpecified, with others peculiar to the place.

Σκέυη ἀργυρᾶ.	Silver plate, or plated.
Σίδηρα ἐλάσσω.	Iron, but in leſs quantity.
Λιθία.	Flint glaſs.

Exports.

Κασσίας χρῆμα[143] πλεῖσον ὁ καὶ μειζόνων πλοίων χρήζει τὸ ἐμπόριον.	Cinnamon, of an inferior quality, and *in great quantities*; for which reaſon, veſſels of a larger ſort are wanted at this mart.

[142] As Paris, Berry, Vannes, Triers, &c. &c.

[143] Some MSS. and the edit. Baſil. read χυμα, which, according to Salmaſius, is right. See Plin. Exer. p. 542. He refers it to χυδαῖον, as ſignifying a *great quantity*. I underſtand it as *common, ordinary*, of an *inferior* or *cheaper* ſort. See Perip. p. 28. Ὀθονίον χυδαῖον, ordinary cottons. But the immediate addition of ὁ καὶ μειζόνων πλοίων χρήζει, implies quantity, and requires χρῆμα, rather than χῦμα.

Εὐόδια.	Fragrant gums.
Ἀρώματα.	Gums or drugs.
Χελωνάρια ὀλίγα.	Tortoiſe-ſhell, of ſmall ſize, and in no great quantity.
Μοκρότον ἧττον τᾶ Μανδιτικᾶ.	Incenſe, in leſs quantities or inferior to that of Mundus.
Λίβανος ὁ περατικός [144].	Frankincenſe of the coaſt of Adel.
Ἐλέφας.	Ivory.
Σμύρνα σπανίως.	Myrrh, in ſmall quantities.

The Moſyllitick trade of the ancients has been noticed already; and the cinnamon mentioned in this catalogue is a ſufficient proof of Arabian merchants conducting the commerce of the place. An inferior ſort of cinnamon indeed is a native production [145], but the Moſyllitick ſpecies is enumerated by Dioſcorides as one of prime quality, and conſequently not native but Oriental. The immenſe wealth of the Sabêans, as deſcribed by Agatharchides, proves that in his age the monopoly between India and Europe was wholly in their hands; but the other tribes of Arabia traded to India alſo; and the Greeks of Egypt by degrees found the way to Aden and Hadramaut in Arabia, and to Moſyllon on the coaſt of Africa. Here they found rivals to the Sabêan market, and ſupplied themſelves at a cheaper rate.

[144] Imported either from the oppoſite coaſt of Arabia, which did always and ſtill does produce this article, or from India, the incenſe of which, Niebuhr ſays, is better and purer than the Arabian; but it rather refers to τὰ πιρὰ.

[145] A ſpecimen of African cinnamon I have ſeen in the curious and ſcientifick collection of Dr. Burgeſs; it is ſmall, hard, and ligneous, with little fragrance.

After

After another courſe of two days, or an hundred miles, we are conducted to Nilo-Ptoleméon. It is the laſt diſtance ſpecified, and may be terminated either at the Soel of d'Anville, or at Metè, where there is alſo a river: the former is preferable, becauſe the Periplûs makes mention of two rivers at leaſt between Nilo-Ptoleméon and Aromata; and if we aſſume Soel for Nilo-Ptoleméon, we can find two other rivers, one at Metè, and another near Mount Elephant, which is the Elephant River of the Periplûs, and the Rio de Santa Pedra of the Portugueſe. Strabo mentions the name of Nile on this part of the coaſt.

NILO-PTOLEMAION.

XI. At Nilo-Ptoleméon we exhauſt three thouſand eight hundred out of the four thouſand ſtadia allotted by the Periplûs to the range of marts, which are called by the common name of Te-para [146]; and, ſpeaking in a round number, it may be preſumed the author eſtimates his four thouſand as terminating at this place: this gives a meaſure of four hundred Roman miles, where the real diſtance is about four hundred and fifty; a correſpondence certainly ſufficient where there is no better eſtimate of meaſurement than a ſhip's courſe: and, ſenſible as I am that the particulars of d'Anville are better adapted to the diſtances at the commencement, the concluſion of the courſe and the poſition of Moſyllon are more conſiſtent in the arrangement I have adopted. It is, however, at beſt but hypothetical, and ſubmitted to the future determination of thoſe who may obtain a more perfect knowledge of the coaſt.

[146] Τάπαρα ſic forſan dicta quia ſe mutuò tangunt et conſequuntur, Stuckius. But it ſeems, as already noticed, τὰ πίρατα. See Perip. p. 8. and Stuckius Com. p. 29.

But

But we are now arrived at a point in which there will be nothing equivocal. The promontory of Arômata, with its two inferior capes, Elephant and Tabai, will be deſcribed with a preciſion in perfect correſpondence with modern obſervation; and the circumſtances are ſo peculiar, that they beſpeak the teſtimony of one who delineated them on the ſpot.

Marts, TAPATÊGÊ. DAPHNÔN MIKROS. ELEPHAS, Prom.

Rivers, ELEPHAS. DAPHNÔNA MEGAS, or AKANNAI.

XII. The places which occur are Tapatégè [147], the leſſer Daphnôn [148], and Cape Elephant; the rivers are the Elephant, and the greater Daphnôn, called Acannai. Neither place or diſtance are aſſigned to any of theſe names, but we may well allot the rivers Daphnôn and Elephant to the ſynonymous town and cape; and theſe may be repreſented by the modern Metè and Santa Pedra. The river at Metè is deſcribed by the Portugueſe as dry at certain ſeaſons. When they landed here under Soarez [149] in great diſtreſs,

[147] The literal tranſlation of this paſſage runs thus: "Sailing along the coaſt two days "from Moſyllon, you meet with Nilo-Ptole-"maion, Tapatêgê, the leſſer Daphnôn, and "Cape Elephant..... then towards the "ſouth weſt, (εἰς λίβα,) the country has (two) "rivers, one called the Elephant River, and "the other the greater Daphnôn or Akan-"nai..... after this the coaſt inclining "to the ſouth, [εἰς τὸν Νότον ἤδη,] ſucceeds the "mart of Arômata, and its promontory, "which is the termination of the Barbarick "coaſt, and a projection more eaſterly than "Apokopa."

The text is ſo very corrupt in this part of the work, and the points of the compaſs ſo diſcordant, that, after ſeeing Mr. Goſſelin's work, I endeavoured to reconcile them by following his ſyſtem, and carrying Cape Arômata, which I have fixed at Gardefan, to Daffni; but though this does relieve in ſome degree the expreſſions Εἰς λίβα and Νότον, ſtill the two promontories of Gardefan and Daffni are ſo ſtrongly marked by Arômata and Tabai, that I returned to my own arrangement. Tabai is characteriſed as a promontory at the head of a Cherſoneſe, and that is ſuch evidence as hardly to leave a doubt upon the queſtion.

[148] Dioſcorides Daphnitis eſt Caſſiæ ſpecies, ſic appellatur a Daphnunte magno vel parvo ubi olim forſan provenit. Stuckius, not. p. 24. ſed potius a Lauretis, p. 25.

[149] Marmol, lib. x. p. 200.

they

they found the place deferted and no water in the river; but a woman whom they ſeized directed them to open pits in the channel; and by following her advice, their wants were relieved. Commodore Beaulieu [150], who anchored a few leagues north of Gardefan, received ſimilar inſtructions from the natives with the ſame ſucceſs. Theſe circumſtances are mentioned to identify the exiſtence of rivers on this coaſt; and I think I can diſcover in the map, framed by Sanſon for the French edition of Marmol, that the learned geographer paid attention to theſe rivers of the Periplûs.

Cape Elephant is formed by a mountain conſpicuous in the Portugueſe charts, under the name of Mount Felix or Felles, from the native term, Jibbel-Feel [151], literally Mount Elephant. The cape is formed by the land jutting up to the north from the direction of the coaſt, which is nearly eaſt and weſt; and from its northernmoſt point the land falls off again ſouth eaſt [152] to Cape Gardefan, the Arômata of the ancients.

But if we have the authority of the Portugueſe for a river at Metè, we learn from an Engliſh navigator the ſame circumſtance at Jibbel-Feel. Capt. Saris [153], in 1611, ſtood into a bay or harbour here, which he repreſents as having a ſafe entrance for three ſhips

[150] An intelligent French Commander, in 1619, whoſe voyage is publiſhed by Melchizedec Thevenot, and inſerted in Harris. The pits Beaulieu opened were on the ſhore.

[151] Jibbel-Feel, Arabick, from the Heb. גבל.

Bruce is angry at the miſnomer of Felix. Perhaps other names in the Periplûs would admit of tranſlation, if we knew the language to refer to.

[152] Εἰς τὸν Νότον, Perip. not correct; becauſe, according to the author's own ſyſtem, Arômata is the eaſternmoſt point of frica.

[153] Saris calls the place *Feluke*, from the Portugueſe *Felix*, but as he deſcribes it between Gardafui and Demety, [Metè,] there can be no miſtake. Purchas' 8th voyage of the Eaſt India Company, vol. ii. p. 340.

a-breaſt

a-breaſt, and that both wood and water were in plenty; he adds alſo, that ſeveral ſorts of gums, *very ſweet in burning*, were ſtill purchaſed by the Indian ſhips from Cambay, who touched here for that purpoſe in their paſſage to Mocha.

The whole detail of this coaſt, from the ſtraits of Bab-el-Mandeb to Cape Gardefan, is principally derived from the Portugueſe, who ravaged it under the command of Soarez, in the years 1516 and 1517. Corſali, whoſe account is preſerved in Ramuſio, ſerved in the expedition. Soarez [154] had been ſent againſt the Turkiſh force collected in Arabia, a ſervice which he conducted with great ignorance and ill ſucceſs. The diſtreſs of his fleet he endeavoured to relieve by plundering the coaſt of Adel; Zeyla, Barbora, and Metè were deſerted on his approach, where little was obtained. Zeyla is deſcribed as a place well built and flouriſhing; but of Adel, the capital, little is to be found. That the power of the kingdom was not injured by theſe ravages appears from the ſucceſs of its arms againſt Abyſſinia between this time and the year 1564, which extended almoſt to a conqueſt, with encreaſing hatred againſt every thing that bore the Chriſtian name. Little is known of this country ſince the decline of the Portugueſe, but that the government is Mahometan, and the governed are removed but a few degrees from the Cafres of the coaſt below.

At the marts which ſucceed Nilo-Ptoleméon in the Periplûs, no articles of commerce are ſpecified, except frankincenſe, in great quantity and of the beſt quality, at Acannai. This is ſtyled *Peratick* [155], or *foreign*. But it cannot be admitted in that ſenſe as to

[154] This expedition is found in Oſorius, di Barros, Faria, and Bruce.

[155] Ὁ πιρατικὸς.

the

the commodity itſelf, for it is noticed expreſsly as a native [156] produce of the place. Still it will lead us to ſolve a difficulty already noticed in regard to theſe ports of Barbaria, called Ta-pera, which, by a ſlight correction [157] of the text, will ſignify the ports *beyond* the ſtraits. The articles obtained here would naturally be ſtyled Peratick, from (Pera) *beyond*, and would be known by this title in the invoices, and the market of Alexandria, in contradiſtinction to thoſe obtained in Sabêa, Hadramaut, or India. The author is writing to Alexandrians, and is conſequently ſpecifying the preciſe ports where thoſe commodities were obtained, which they knew by the name of Peratick.

This is not the only difficulty in this part of the work before us: the quarters of the heaven are dubiouſly deſcribed; the ſentences are ill connected or imperfect. There is at leaſt one interpolation [158], or a corruption equivalent; and it is not known that any manuſcript is in exiſtence, which might lead to a correction of the

[156] Ἀχάναι ἐν ᾗ μονογενῶς Λίβανος ὁ πικρατικὸς πλεῖστος καὶ διάφορος ΓΙΝΕΤΑΙ, "where more "especially the Peratick frankincenſe in "greateſt quantity, and of the beſt quality, is "produced." All the teſtimonies of the ancients unite in ſuppoſing Thus or Frankincenſe to be the peculiar native produce of Sabêa. But Bruce and Niebuhr both agree, that it is not a native, and that the beſt is not produced in Arabia, but procured from Adel and India. But in Arabia the ancients firſt met with it, both produced there and imported. How correſpondent is the evidence of Bruce and Niebuhr to that of our Alexandrian merchant!

[157] Τὰ πίρα, the ports *beyond* the ſtraits. See Perip. p. 8. τύπειραν.

[158] Καὶ ἀκρωτήριον Ἐλέφας, [ἀπὸ Ὀπώνης εἰς Νότον πρόχωρεῖ] The five concluding words are a manifeſt interpolation, becauſe we are not yet arrived at Arômata, and Opônè is ſubſequent. From Arômata to Opônè the tendency of the coaſt is ſouth weſt; and from Opônè it continues the ſame: but from Elephas the coaſt lies ſouth eaſt to Arômata; and Elephas is not connected with Opônè at all. Stuckius and Hudſon both complain of the corrupt ſtate of the text. And Sigiſmundus Gelenius, who publiſhed the firſt edition at the preſs of Frobenius, Baſil, 1532, in his Prefatory Epiſtle, takes no notice whence he had the manuſcript. See edit. Froben, Baſil, 1532.

text. Under theſe circumſtances, indulgence is due to the attempts which have been made to preſerve, in any degree, the connection and conſiſtency of the narrative.

We now arrive at Cape Arômata or Gardefan, a place of importance in every reſpect; for it is the extreme point eaſt of the continent of Africa; it forms the ſouthern point of entrance upon the approach to the Red Sea; and it is the boundary of the monſoon from cauſes that are almoſt peculiar. Its latitude is fixed

6° 0′ 0″ N.		by Ptolemy [159].
12° 0′ 0″	-	Beaulieu.
11° 30′ 0″	-	D'Anville.
13° 30′ 0″	-	Bruce.
12° 0′ 0″	-	in Lacam's chart, and the general one by Lawrie and Whittle.

Beaulieu, who anchored within four leagues of Gardefan, deſcribes it as a very high bluff point, and as perpendicular as if it were ſcarped. The current comes round it out of the gulph with ſuch violence that it is not to be ſtemmed without a briſk wind, and during the ſouth weſt monſoon, the moment you are paſt the cape to the north, there is a ſtark calm with inſufferable heat.

This current, we may conclude, is not conſtant, and probably depends upon the direction of the winds; for Faria mentions a ſhip that was ſeparated on the coaſt and carried to Zeyla by the current.

[159] It is very remarkable that the latitude of Ptolemy ſhould be ſo very erroneous on this coaſt, which was viſited every year by merchants he muſt have ſeen at Alexandria.

And

And Purchaſe [160], from Fernandes, aſſerts, that the current ſets into the gulph during the increaſe of the moon, and out of it upon the wane. The current below Gardefan is noticed by the Periplûs as ſetting to the ſouth, and is there, perhaps, equally ſubject to the change of the monſoon.

There is great diverſity in writing the name of this promontory, and of its two ſubordinate capes. Bruce is very urgent in directing us to write it Gardefan, and not Gardefui [161], as it appears upon many of the charts; Gar-defan, he ſays, ſignifies the ſtraits [162] of Burial, and we have had Metè or Death before, names which imply the ſufferings or terrors of the navigators. The Greeks, if their appellations may be admitted as a proof, were either better omened or leſs alarmed.

TABAI.

XIII. At Arômata the Periplûs marks in the moſt pointed manner, that the coaſt falls in to the ſouth; and in another place ſpecifies its ſoutherly or ſouth weſterly direction to the limits of ancient diſcovery. But before it touches upon this, another cape is marked, called Tabai, which anſwers to the d'Orfui [163] of the Portugueſe, about ſeventy-five geographical miles ſouth of Gardefan. And thus is Arômata, with its two inferior capes, defined as preciſely by the Periplûs as Gardefan could be by the beſt geographers of the moderns.

[160] Faria, vol. i. p. 158. Purchaſe, vol. i. p. 751.

[161] Vol. i. p. 443.

[162] An error, perhaps, for cape, ibid.

[163] Harris, in Beaulieu's Voyage, calls it Orpin. Beaulieu lay near two months to the ſouthward of Orpin or Tabai. Harris, i. p. 726. Orpin approaches to Opône.

The author expreſsly mentions alſo that Arômata is farther eaſt than Apókopa, and actually the moſt eaſtern point of the continent; the anchorage, he adds, is totally expoſed, and in ſome ſeaſons very dangerous, becauſe it is open to the north. The certain prognoſtick of an alteration in the weather is when the ſea changes colour and riſes turbid from the bottom. Upon the ſight of this, the veſſels which are at anchor here weigh inſtantly, and fly to Tabai for ſhelter. This remark is the more valuable, as the author himſelf mentions it rather as the effect of an accidental change of the wind than of the monſoon. But as we have obſerved before, that in the ſouth weſt monſoon, Beaulieu found a dead calm to the north of Gardefan; from the ſame cauſe, in the ſeaſon of north eaſt monſoon the calm will be on the ſouth of Arômata and Tabai, or d'Orfui [164].

With this delineation before us of the moſt prominent feature on the coaſt, whatever failure may be diſcovered in fixing the ſtations from the ſtraits to the cape, it can by no means diſcredit the originality of the work. Diſtance of time, the changes of power, or commerce, may have defaced the particular features we have deſcribed, but the general appearance of truth and fidelity is indiſputable. If any accident ſhould lead an Engliſh navigator again

[164] Orfui is written d'Orfui, Arfur, d'Arfur, and Carfur, poſſibly for Cape Arfur; but the true orthography ſeems that of Bertholet, who writes d'Affui; or, perhaps, as Reſſende does, Daffui; apparently the ſame word as Tabai, if we conſider that the Greek pronunciation of Tabai is Tavai, and that Tavai, Davai, and Davui, naturally approach Daffui; but I conſign this to future inquiry upon the ſpot; and future inquiry may likewiſe determine whether the two capes Daffui and Gardefui are relative appellations, for this I ſuſpect, and think it poſſible that the relation may be diſcoverable in the Arabick: the ſame relation holds good in another form of orthography, which is Afun and Gardefun. Could I aſcertain which was right, I ſhould as readily conjecture that Opônè [or Ophônè] was Afun, as that Tabai was Daffui. But there is no end of conjecture, without a knowledge of the language.

to

to this barbarous and neglected coaſt [165], it is very poſſible that the deſcriptions of places, brief as they are, may be recognized by a judicious obſerver, and the ancient narrative be eſtabliſhed on modern inveſtigation.

The articles of commerce obtained at Arômata we may collect from its title; for Arômata, (although Salmaſius informs us it is the name for drugs in general,) in this journal, at leaſt, ſignifies gums, ſpices, odours, and fragrant productions of every kind. The veſſels which traded here we may ſuppoſe anchored to the north or ſouth of the cape according to the ſeaſon, and muſt have received or delivered their cargoes in boats and rafts, as has been noticed at previous anchorages. The change of the monſoon muſt likewiſe have been watched, as it is noticed in the Periplûs; no particulars of import or export are however mentioned here; but at Tabai or d'Orfui, it is ſaid, that they brought the ſame articles of commerce as to the coaſt above, and received the following commodities in exchange, which were native:

Κασσία.	Cinnamon.
Γίζειρ.	Cinnamon of a ſmaller ſort.
Ἀσύφη.	Cinnamon, ordinary.
Ἄρωμα.	Fragrant gums; but as inſerted here, perhaps, a ſpecies of cinnamon.

[165] In the fleet ſent to cruize at the mouth of the Red Sea, in 1798 and 1799, when the French in Egypt were ſuſpected of an intention to eſcape to India, ſome intelligent Engliſh officer may have made obſervations which would contribute more to ſolve the difficulties of this navigation than any which can be collected from the documents which have been publiſhed.

Μώγλα,

Μάγλα, Μοτὰ.	Cinnamon of inferior quality.
Λιβανος.	Frankincenſe.

At Arômata terminates the modern kingdom of Adel, and the Barbaria of the Periplûs; and here the coaſt of Ajan or Azania commences; in which our author is more correct than Ptolemy, who extends the limits of Barbaria farther to the ſouth. Azam [166] or Ajam ſignifies water, according to Bruce; and in this ſenſe is applied to the weſtern coaſt of the Red Sea, in oppoſition to the Arabian ſide where water is not to be had. If Ajan has any reference to this, it ſeems very ill applied to the coaſt before us; for between Arômata and Apókopa is a moſt deſolate ſhore, where hardly the name of a habitable place occurs in the modern charts, and where the Periplûs, from Opônè, is a total blank. At Apókopa, the Cape Baxos [or Shoal Cape,] of the Portugueſe, commences the coaſt of Zanguebar, ſo called from the iſland of that name, the trace of which is preſerved in the Zengiſa of Ptolemy.

The following table is now ſubmitted to the reader, with a juſt confidence in its general correſpondence, but not without requeſting a candid allowance for poſſible error in ſome few particulars:

[166] A kingdom called Adea is placed here by the maps; but the authors of the Univerſal Hiſtory deny its exiſtence, and ſo does Ludolfus; but the natives, he ſays, are called Hadiens, i. e. Ajans, whence the corruption into Adeans and Adea.

Coaſt

Coaſt of Azania from Cape Arômata to Rhapta [and Praſſum.]

[N. B. D before the name of a place marks D'Anville. * Points ſuppoſed to be aſcertained. ? Doubtful.]

Stadia of the Periplûs.	*Arrian.*	*Ptolemy.*	*Lat. North.*	*Modern Names and Latitudes.*
Allowed 900	I. Arómata -	Arómata -	6° 0′ 0″	D. * Gardefan 11° 45′ 0′
	II. Tabai [167] -	Panopros Vicus Panón [168].	5° 0′ 0″	D. * d'Orfui Daffui. 10° 30′ 0″
	III. Opônè -	Opônè -	4° 45′ 0′	D. C. Delgado ? Bandel Caus Bay of Galee } 9° 45′ 0″
400	Four hundred ſtadia from Tabai round the Cherſoneſe, hence the coaſt tends ſtill more to the ſouth, the current alſo ſets to the ſouth.			
	IV.	Zengiſa [169] -	3° 30′ 0″	Related to Zenzibar?
		Phalangis Mons. [170]	3° 30′ 0′	Morro Cabir ? 8° 0′ 0″
	V. Apókopa the leſs	Apókopa -	3° 0′ 0″	Zorzella ?
3000	VI. Apókopa the greater Six days' ſail, a river noticed, but none occurs in the maps.	Noti Cornu [171] Southern Horn or Cape.	2° 12′ 0″	D. * C. Baxas Shoal Cape. 4° 35′ 0
	VII. Little coaſt -	Little coaſt -	1° 0′ 0″	
3000	VIII. Great coaſt - Six days' ſail.	Great coaſt [172]	2° 30′ 0″	D. * Magadaſho 2° 0′ 0″ N.
7300				

167 Between Arômata and Tabai it is called the Bay of Belha or Beyla.

168 It has been ſuggeſted to me that Panopros might allude to Pan's πρόσωπον, but there is only mere conjecture to guide our inquiries. I have ſuppoſed, upon no better ground, that Orfui might be concealed in Opros; but Ptolemy writes Panôn Kômè. The village of Panôn, or the village of Pans and Satyrs? A name, perhaps, given from the rude appearance of the natives. It is remarkable that the Periplûs ſhould mention men of gigantick nature on this coaſt; and that Beaulieu, certainly without any knowledge of the Periplûs, ſhould notice the ſame appearance. See his Voyage in Harris and Melchiz. Thevenot, he paſſed the ſteamy ſeaſon near this very ſpot. Μίγεσι δὲ σώμασιν περὶ ταύτην τὴν χώρην ἀνθρώποις ὀρεσιβάταις καταικοῦσιν. Perip. p. 10. This circumſtance indeed is at Rhapta.

169 Ptolemy's Azania commences at Zengiſa. See lib. i. c. 17. Zengiſa and Phalangis have both the ſame latitude, and may be identified with Morro Cobir, if that has three points. The term Zengiſa is curious, as related to the coaſt of the Zinguis or Cafres, ſo early as Ptolemy.

170 Phalangis is deſcribed as a forked mountain with three heads. Ptol. lib. i. c. 17. This gives it a character which will enable any future navigater to fix it for a certainty.

171 It is remarkable that Ptolemy, lib. i. c. 17. where he details this coaſt, makes no mention of [ἡ νότου κέρας,] the Southern Horn.

172 Two degrees thirty ſeconds is certainly an error, as the account is carried to the ſouth.

Stadia of the Periplûs.	*Arrian.*	*Ptolemy.*	*Lat. North.*	*Modern Names and Latitudes.*
Allowed 7300	IX.	Essina [173] -	0° 0′ 0″	Brava? - 1° 0′ 0″ N.
		Under the line.		
500	X. Serápion, one day's sail	Serapion -	3° 0′ 0″ S. lat.	
500	XI. Nikon, one day's sail	To Nikè - Niki.	4° 45 0″ S.	
				* Coast of Zanzibar and Melinda.
3500	XII. Several rivers and roads each a day's sail, in all seven, ending at the -			Mombaça? - 3° 50′ 0″ S.
	XIII. Pyralaan islands and the new canal.			Pemba? D. 4° 45′ 0″ S.
				Zanzibar? D. 6° 35′ 0″ S.
2000	XIV. Eitenediom - Menouthésias, two courses of twenty-four hours each [174]			* Monsia D. 7° 32′ 0″ S.
		Rhapton River	7° 0′ 0″ S.	Patê Sio Ampaça Lamo D. 1° 50′ 0″ S.
		Rhapton metropolis of Barbaria	7° 0′ 0″ S.	Melinda of Marmol and di Barros 2° 35′ 0″ S.
		Rhapton, prom.	8° 20′ 12″ S.	Quiloa and Cape Delgado, lat. 10° Vossius and the author. 8° 30′ 0″ S.
1000	XV. Rhapta, two day's sail			Madagascar?
		Menouthias	12° 30′ 0″ S.	Mosambique? 15° 0′ 0″ S.
		Prasum [175]	15° 30′ 0″ S.	
		Head of the Nile	13° 0′ 0″ S. 12° 30′ 0″	

14,800 stadia = 1480 miles, divided by 75, the number of Roman miles in a degree give 19 degrees, 55 miles. The real distance from Gardefan to Quiloa is somewhat more than 20 degrees.

173 There is an Asun which Stuckius from Belleforest supposes to be Essina; but it is only one more corruption by writing Asun for Asun, which is the same as Affui or d'Affui. This may be proved by consulting Barbosa in Kamus: vol. i. p. 290. and the Modern Universal History, vol. xii. p. 307. Belleforest is of little authority. He wrote a Cosmography in 3 vols. fol. about 1560.

174 Νυχθημέρους ..... τῇ Θεοφίλα τῇ ΝΥΧΘΗΜΕΡΟΥ φορὸν πλοῦν χιλίων ὑποτιθεμένω σταδίων. Ptol. lib. i. c. 9.

175 Prasum, from Prasos, green. Marcian. Herac. apud Hudson, p. 12.

N. B. *At page* 126, *note* 147, *the change of Arômata, imputed to Mr. Gosselin, is not founded, and I take this opportunity of recalling the imputation, as the correction was too late for the press.*

Obſervations on the foregoing Table.

If it were at any time allowable to build on the meaſures of an ancient journal, it might be preſumed that the preſent inſtance affords grounds for it, juſtifiable in an uncommon degree. The latitude of Gardefan, according to d'Anville, is[176] 11° 45′ 0″ N. and that of Quiloa 8° 30′ 0″ S.[177] making 20° 15′, where the Periplûs gives 19° 45′, an approximation never to be expected in eſtimates of this ſort, and liable to ſuſpicion merely on account of its correſpondence. But let it not be imagined that Quiloa or Cape Delgado are aſſumed for Rhaptum from the diſtances of the journal, becauſe, if they cannot be ſupported by circumſtances, they may juſtly be abandoned.

Whatever may be the corruption of the text in Eitenediommenouthefias[178], all the commentators, with common ſenſe in their favour, are agreed, that the latter part of this ſtrange pluriſyllable points out the iſland Menûthias; and the ſuffrages greatly prevail in favour of making this iſland the Zanguebar of the moderns. Now there are three iſlands almoſt in a line, Pemba, Zanguebar, and Monfia, placed between latitude 5° 30′ 0″ and 9° 0′ 0″. All theſe iſlands lie (as the author aſſerts of his Menûthias,) about three hundred ſtadia or thirty miles from the coaſt, and there is no other iſland in the whole range from Gardefan to Quiloa, which anſwers to this deſcription, but theſe three. One of them, therefore, doubtleſs is Menûthias; and as Zanguebar is the centre, the moſt conjectu-

[176] 12° 0′ 0″ alii. [177] 10° 0′ 0″ alii. [178] See infra and Appendix No. I.

ous, and the one which gave name to the coaſt in all ages [179], it is with great juſtice that we ſhould give this the preference. Two additional circumſtances confirm this; the Pyraláan iſlands are two thouſand ſtadia previous, and Rhaptum one thouſand ſtadia ſubſequent. Neither of theſe diſtances are inconſiſtent [180], if we aſſume Mombaça for the Pyraláan iſles, Zanguebar for Menûthias, and Quiloa for Rhaptum: and that we may aſſign the Pyraláan iſlands juſtly to Mombaça there is great reaſon to believe; becauſe they are evidently cloſe to the continent, and not at thirty miles diſtance like the other three; and becauſe notice is taken of a new cut or canal, which intimates the continent in its vicinity, and cannot apply to an iſland which lies in the open ſea. Add to this, that Mombaça is on an iſland in a bay, ſeparated by a very narrow channel from the main, and we have then a circumſtance parallel [181] to the new canal of the journal, a work which might as well have been executed for protection or convenience by the Arabs who

[179] Ptolemy's Zengiſa is the firſt inſtance of the name. Zingi, or the coaſt of Zingi, is found in all the Oriental writers, and Zinzibar in Marco Polo. Zinguis are blacks or Cafres, according to the Univerſal Hiſtory, vol. xii. and Zangue-bar the Cafre coaſt.

[180] They would ſuit better with Monſia than Zanguebar; but the reaſon for preferring the latter is ſtated here, and will be conſidered more at large preſently. N. B. Duarte de Lemos, in 1510, landed at Zanguebar and drove the natives to the *mountains*; a proof that it is not a low iſland as Menûthias is deſcribed by the Periplûs. Faria, i. p. 158.

[181] Caſtaneda ſpeaks of Mombaça as an iſland *hard by the firm land*, p. 22. Oſorius ſays, it is on a high rock with the ſea almoſt ſurrounding it, vol. i p. 60. May not *almoſt* have been done away by a cut of this ſort. Faria calls it an iſland made by a river which falls into the ſea by two mouths, vol. i. p. 41. See the iſland delineated in a Portugueſe map, Melchiz. Thevenot, vol. i. part 2. It is joined to the continent at low-water by a cauſey. Marmol, lib. x. p. 150. Fr. Ed. and the Univerſal Hiſtory writes, "The city was once "a peninſula, but hath ſince been made an "iſland by cutting a canal through the "iſthmus." Vol. xii. p. 341. This circumſtance might with equal propriety, and on equal grounds, have taken place in the age of the Periplûs, for the ſecurity of the ancient Arabian ſettlers as of the modern.

ſettled

ſettled there in thoſe early ages, as by thoſe whom the Portugueſe found there, three centuries ago [182].

It now remains to be obſerved, that the preceding table manifeſtly proves the correſpondence between Ptolemy and the Periplûs. The names of the places differ little, and both accounts terminate at Rhapta; for the Praſum of Ptolemy is not ranged under his detail of this coaſt, but is introduced in another chapter incidentally, bounding over ſeven [183] degrees at one ſtep, without the intervention of a ſingle circumſtance or place. This Praſum he has by his own confeſſion fixed from conjecture only [184]; and this, with his Menûthias, clearly diſtinct from the Menûthias of the Periplûs, will be conſidered in its proper place. I muſt now add, for the credit of the Periplûs, that it carries that appearance of conſiſtency with it, which would naturally attend it, if compoſed by a voyager from his journal, while the catalogue of Ptolemy is by no means in harmony with his commentary [185].

AZANIA, Coaſt of AJAN.

The Periplûs is entitled to no ſmall ſhare of praiſe for the accuracy with which it defines the limits of the territories on the coaſt from the ſtraits of Bab-el-Mandeb to Rhapta; and this is the more remarkable as the demarkation of Ptolemy is not conſiſtent with the natural

[182] Mombaça was taken by Almeyda.

[183] Rhpaton Prom. 8° 20′ 12″, Praſum, 15° 30′ 0″.

[184] See lib. i. c. 9.

[185] Compare lib. iv. p. 112. c. 7. with lib. i. c. 17. where Opônè is ſix days' ſail from Panopros or Panôn, while the latitude differs but fifteen minutes, at p. 112. Marcian, his copyiſt, was ſo ſenſible of this, that he has not ventured to give the ſtadia on this coaſt. See infra.

diviſions of the country. The Avalitick gulph terminating at Mount Elephant, he ſtyles the coaſt of the Troglodytes, but the Periplûs reſtrains this appellation to the country that forms the margin of the Red Sea, and terminates at the ſtraits; and from the ſtraits to Cape Gardefan, the author calls it Barbaria [186], correſponding naturally with the limits of the modern Adel. At Gardefan, the kingdom of Aden [187] commences, the coaſt of which is ſtyled Ajan, in perfect harmony with the Azánia af the Periplûs. But Ptolemy, who commences his Barbaria at Mount Elephant, carries the ſame appellation down to Rhapta, which he calls the metropolis, and conſequently removes the commencement of Azánia beyond the boundary which is in reality its termination. The Periplûs, it is true, extends this title beyond the limits of the modern Ajan; for the coaſt of Zanguebar commences with Cape Baxos, or at fartheſt with Melinda, while the Periplûs carries on Azánia ſeveral degrees farther to Rhapta; by which it appears that the author was not informed of any change in the name to the utmoſt extent of his knowledge.

There are, however, diviſions of the coaſt and boundaries fixed, which appear correſpondent to thoſe which the Portugueſe found upon their arrival. Theſe are preſerved in a manuſcript map of Bertholet's [188], inſerted in Reſſende, and ſtrongly confirm the opinion that the author of the Periplûs deſcribes rather what he ſaw himſelf than what he collected from others.

[186] Barbaria is the conſtant term of Al-Edriſſi, and the Oriental writers. Barbara is ſtill a town on this coaſt, and to all appearance the Moſyllon of the ancients.

[187] An imaginary kingdom, according to the Univerſal Hiſtory.

[188] Bertholet dates one of theſe maps (for there are ſeveral by him) 1635, and writes, Petrus Bertholet primùm Coſmographicum Indianorum imperium faciebat.

The firſt diviſion of Bertholet comprehends the tract from the bay ſucceeding Cape d'Affui to Cape Baxos, anſwering nearly to the Opônè and Apókopa of the Periplûs.

Cape de Gardafui	-	Gardefan -	Arômata.
Eneeada de Belha	-	Beyla bay.	
Cape d'Affui	-	Arfur, Carfur	Tabai.

Odelerto: fo in the MS. perhaps for Deſerto, the Deſert Coaſt.	Enceada da Galee	-	Bandel Caus? -	Opônè.
	Bandel d'Agoa	-	Delgado.	
	Enganos de Surdos.			
	Cunhal.			
	Os Bodios.			
	Punta dos Baxos	-	Shoal Cape -	Apókopa. Noti Cornu.

The ſecond diviſion takes the general name of Magadoxo from the principal town, and anſwers to the Little and Great Coaſt of the Periplûs.

Magadoxo	Os Balaros	-	-	} Little Coaſt.
	Bandel Velho	-	-	
	Magadoxo	-	-	} Great Coaſt.
	Mariqua	-	-	
	Brava -	-	-	Eſſina of Ptolemy.

The

The third diviſion is by iſlands and rivers all the way, correſponding exactly with the number of ſeven rivers, as ſtated by the Periplûs.

Iſlands and Rivers	Boubo, Rio 1 [189].	Coaſt of Zanguebar and Melinda	Serapion? Nicon?
	Jugo, Rio 2.		
	Cama.		
	Tumao, Ilha.		
	Sangara, Ilha.		
	Tema, Ilha.		
	Guaſta.		
	Mane, Rio 3.		
Pattè	Quiami, Rio 4.		
	Punta da Bagona, Rio 5.		
	Empaça.		
	Pattè, Rio 6.		
	Mandaro, Rio 7.		
	Lamo.		
	Jaque.		

Zanguebar is a native appellation given to the coaſt from the iſland of the ſame name. It is noticed as early as the two Arabian voyagers and Marco Polo [190]. M. Polo calls the coaſt the iſle of Zamzibar, and gives it a circumference of two thouſand miles, evidently applying it

[189] It is fruitleſs to allot Serapion or Nicon to any particular name; but the correſpondence of ſeven rivers in the ancient and modern account is highly remarkable.

[190] The doubts which were entertained concerning the authenticity of the voyage of theſe Arabians, publiſhed by Renaudot, have been fully cleared up. The original has been found in the Royal library at Paris, the exiſtence of which had been confidently denied by Martin Folkes, and other very learned men.

to

to the then undiſcovered country of Lower Africa. In the two Arabians and other Oriental writers we read the ſame name given to this tract, with the title of Zingis or Zingues applied generally to all the inhabitants of the eaſtern coaſt of Africa.

The firſt trace of this word is found in the Zengiſa of Ptolemy[191], which he places at Mount Phalangis on the coaſt of Ajan, anſwering, as far as I can diſcover, to the Morro Cobir of the Portugueſe. It is poſſible that the commencement of Zanguebar and of the Zingis was placed here by the natives in that early age, or that the influence of the title extended ſo far. Of this, indeed, there are no traces in the Periplûs. I ſuſpect Menutheſias, the term uſed in that work, to be equivalent in its application to the extenſion of the modern title of Zanguebar, from the iſland to the coaſt.

OPÔNÈ.

XIV. AFTER theſe general illuſtrations we are now to proceed to the particular places on the coaſt; and the firſt of theſe is Opônè, which is honoured with the title of a mart[192] both in Ptolemy and the Periplûs. The diſtance aſſigned from Tabai of four hundred ſtadia, or forty miles, makes it correſpond ſufficiently with Ban-del-Caus, which is a bay, or, as its name implies, a port[193]. Opin is a

[191] Zengi (with the g hard) is the Perſian term for Caffrees, and the diſtinction between them and Hhabaſſi, Abyſſinians. India Literata, Valentin, p. 385. Kiaferah, Cofari, Caffres, are in moſt Oriental writers diſtinguiſhed in the ſame manner, and conſidered as Zinguis, oppoſed to Abyſſinians and Arabs. There is a hiſtory of the Zingi by Novairi an Arab, in the Royal Library at Paris. Herbelot.

[192] Ἐμπόριον, in contradiſtinction to Ὅρμος, but ὅρμοι are ſometimes ἐμπόρια.

[193] Bandel is a corruption of the Perſian Bender, or Bunder. A very undefined term for a port, harbour, road, or landing place. The bay, or rather the falling in of the land ſouth of Daffui, is called Galce in Reſſende and Bertholet.

name

name which occurs in the map of Sanſon, inſerted in Marmol; but whether there be any modern authority for it may be doubted, for Sanſon was not unacquainted with the Periplûs, and he may have aſſigned a place accordingly for the Opônè of the journal. The mention of a current ſetting round Tabai, or Cape d'Orfui, down this coaſt, is in all probability conſiſtent with the experience of voyagers in that age; but whether this current is conſtant or changes with the monſoon, muſt be determined by thoſe who viſit this coaſt in different ſeaſons of the year. Stuckius obſerves that, according to Belleforeſt, Opônè is Carfur, of which he ingenuouſly confeſſes his ignorance; but Carfur is only one of the corruptions for Cape d'Orfui, which is written Arfur, Arfar, and Arfui. And as that cape is evidently Tabai, there can be little doubt in fixing upon the next port, Caus, for the true poſition of Opônè.

The imports here are the ſame as thoſe ſpecified at the anchorages preceding.

The Exports are,

Κασσία.	Cinnamon, native.
Ἄρωμα.	Fragrant gums, native.
Μοτὼ.	Cinnamon of inferior quality.
Δελικὰ, κρέισσονα ϗ̀ εἰς Αἴγυπτον προχωρεῖ μᾶλλον.	Slaves of a ſuperior ſort, and principally for the Egyptian market.
Χελώνη πλείστη ϗ̀ διαφορωτέρα τῆς ἄλλης.	Tortoiſeſhell in great abundance and of a ſuperior quality.

The

The ſeaſon for ſailing from Egypt to all theſe ports beyond the ſtraits [194], is in Epiphi, or July, and there are many articles of commerce regularly [195] imported here from the marts of Aríakè [Malabar [196],] and Barygáza [Cambay, or Guzerat]; ſuch as,

Σῖτος.	Corn.
Ὄρυζα.	Rice.
Βούτυρον [197].	Butter, ghee.
Ἔλαιον Σησάμινον.	Oil of Seſamum.
Ὀθόνιον ἥτε μοναχὴ καὶ ἡ σαγματογήνη.	Cottons, coarſe and fine.
Περιζώματα.	Saſhes.
Μέλι τὸ καλάμινον τὸ λεγόμενον σάκχαρι.	Honey from the cane called ſugar.

Many veſſels are employed in this commerce expreſsly for the importation of theſe articles, and others which have a farther deſtination, diſpoſe of part of their cargoes on this coaſt, and take in ſuch commodities as they find here in return.

This paſſage I have rendered literally, as containing one of the moſt peculiar circumſtances in the ancient commerce of this coaſt.

[194] Τὰ πέραν. See Periplûs, pp. 5. 8. Τάπαρα, compare.

[195] Συνήθως, uſually, cuſtomarily.

[196] Malabar is properly the coaſt lower down towards Cape Comorin; but the whole weſtern coaſt takes this name generally. Ariakè is confined to the part between Guzerat and Bombay.

[197] Ghee or butter in a half liquid ſtate is an article of trade from all the weſtern coaſt of India, to the Mekran, to the Gulph of Perſia, and the coaſt of Africa. In India it forms a part of every ſacrifice, and almoſt of every meal; it is in as much requeſt as oil among the Greeks. Some traveller has remarked that the taſte for greaſe is univerſal, from the whale blubber of the Greenlanders to the butter of the Indians.

It manifeſtly alludes to an intercourſe, totally diſtinct from the navigation of the Egyptian Greeks, carried on by the native merchants of Guzerat and Malabar, with the inhabitants of the coaſt of Africa, whom we ſhall preſently find to be Arabs; it ſpeaks of this intercourſe as eſtabliſhed [198], and that ſeemingly previous to the appearance of the Greeks in the country; and when it is immediately ſubjoined, that there is no potentate who has an extenſive influence, but that each mart has its own peculiar ſovereign [199], it preſents a picture both of the trade and country identically the ſame as the Portugueſe found them after an interval of fifteen centuries.

I cannot contemplate this portrait without indulging my imagination, in ſuppoſing that the Eaſt India trade exiſted in this form, as long before the interference of the Greeks, as it continued after the deſtruction of the Roman power in Egypt; and that the nature of the monſoons was perfectly known to the inhabitants of the two oppoſite coaſts, as many centuries before it was diſcovered for the Greeks by Hippalus, as it continued afterwards till the arrival of Gama at Melinda.

APÓKOPA the Leſs, APÓKOPA the Greater.

XV. FROM Opônè the Periplûs conducts us along the coaſt of Azánia, tending ſtill more to the ſouth weſt, to Apókopa the Leſs and the Greater. The diſtance is fixed by a courſe of ſix days, ought to be ſuch, if theſe tribes had been upon the coaſt for ſix or ſeven hundred years before he wrote, as it evidently appears from the Periplûs that they were.

[198] Συνήθως.

[199] Τυραννεις ἰδίοις. Al Edriſſi mentions the Arabs on this coaſt as ſpeaking a different language from that of Arabia, and unknown to the Arabs of his age, p. 24.

equal, by eſtimation, to three thouſand ſtadia, or three hundred miles, without any notice of an anchorage or a mart; without mention of any article of commerce as delivered or received; even in this a reſemblance is preſerved with the modern appearance of the coaſt, for our maps are as barren as the journal, and it is probable that the want of water on the ſhore, mentioned by Beaulieu and other voyagers, has condemned this tract to ſterility and deſolation in all ages.

Ptolemy mentions Zengiſa next to Opônè, and places it in the ſame latitude with a Mount Phalangis, to which he aſſigns a three forked head. This character is indelible; and the obſervation of any voyager who may viſit this coaſt will correct my error, if I am miſtaken in allotting Zengiſa to Bandel d'Agoa, and Phalangis to Morro Cobir. I find no other mountain on the coaſt of Ajan; and the correſpondence of Apókopa the Leſs with the Apókopa of Ptolemy, as well as Apókopa the Greater, with his Southern Horn, gives ſuch an appearance of conſiſtency to both authors, that it confirms me in the arrangement I aſſume.

Anſwering to Apókopa the Leſs we find a Zorzella in the maps, though we have nothing either in our ancient or modern accounts to determine the relation; but the Southern Horn is manifeſtly a cape: it is noticed as ſuch by Ptolemy; and the obſcurity or corruption of the Periplûs, which intimates an inclination to the ſouth weſt [200] at Apókopa, (however dubiouſly applied to the cape or river,) ſtill proves a connexion between this place and the Southern Horn. Both alſo commence the following ſtep with the Great and Little

[200] Stuckius, p. 30. expreſſes the ſame opinion, and concludes that the mention of Λίσα in the Periplûs points out the Νότιον κέρας of Ptolemy.

Coaſt; and conſequently, as far as we have proceeded, both are conſiſtent with our modern accounts and with each other.

In fixing this Southern Horn at Cape Baxas, or the Shoal Cape of the Portugueſe, I am not only directed by d'Anville [201], but confirmed by the detail of the coaſt. And that the Periplûs means Apókopa for a promontory is clear from a previous paſſage, where, when it is ſtated that Cape Arômata is the moſt eaſtern point of all Africa, it is peculiarly marked as more to the eaſt than Apókopa; a certain proof that Apókopa itſelf is alſo a promontory; and if ſo, there is nothing within diſtance north or ſouth, which can anſwer to it, but the Southern Horn of Ptolemy, and the Cape Baxas of the moderns. The mention of a river [202] here by the author is the only circumſtance for which we find no equivalent in the modern accounts.

It is worthy of remark, that the termination of ancient knowledge on the weſtern coaſt of Africa was a horn as well as on the eaſtern; the weſtern horn [203] is a limit to the voyage of Hanno, and the geography of P. Mela, as this Southern Horn formed the boundary of the eaſtern coaſt in the age of Strabo [204]. But diſcovery had

[201] Geog. Anc. vol. iii. p. 62.

[202] The paſſage itſelf is apparently incorrect to a degree.

[203] This is ſometimes alſo called the Southern Horn, but by Mela, Heſperi Côrnu.

[204] Τελεύταιον ἀκρωτήριον τῆς παραλίας; ταύτης τὸ Νότιον Κέρας. Strab. lib. xvi. p. 774. "The "Southern Horn is the laſt promontory on this "coaſt." But it is not quite certain that the Southern Horn of Strabo is the ſame as Ptolemy's, as he mentions it in one place as next but one to Mount Elephant, and in that caſe it would be Arômata; he has the names of ſeveral places from Artemidorus, correſpondent in ſome ſort with thoſe of the Periplûs, which prove, that if in the time of Agatharchides the veſſels from Egypt went only to Ptolemáis Thêrôn, they paſſed the ſtraits in the time of Artemidorus.

Ἄλλη τὶς Νεῖλος, another Nile = Nilo Ptolemêon.
Daphnus = Daphnona.
Libanotrophus prom. = Akannai?
Arômatôphori = Aromata?

The mention of ſeveral rivers alſo with Mount Elephant, &c. &c. proves the exiſtence of a trade here and a knowledge of the coaſt, but it is not diſtinct.

advanced

advanced to Rhapta before the writing of the Periplûs, and to Praſum in the time of Ptolemy. By comparing this progreſs of knowledge, it ſeems as well aſcertained that the author of the Periplûs is prior to Ptolemy, as that he is poſterior to Strabo.

ΑΙΓΙΑΛΟΣ ΜΙΚΡΟΣ, ΑΙΓΙΑΛΟΣ ΜΕΓΑΣ, the LITTLE COAST, the GREAT COAST.

XVI. We come now to the two laſt diviſions of this navigation. The firſt diſtinguiſhed by a courſe of ſix days, and the latter by one of ſeven. Six days are attributed to a tract called the Little Coaſt and the Great, on which not a name occurs, neither is there an anchorage noticed, or the leaſt trace of commerce to be found. We are not without means, however, to arrange theſe courſes, as during the laſt diviſion of ſeven days a river is ſpecified at each anchorage, and we can diſcover preciſely the part of the coaſt where theſe ſtreams begin to make their appearance. The intermediate ſpace, therefore, between Cape Baxas and this point muſt be attributed to the Little and the Great Coaſt; and the termination of it may be fixed at the modern Brava, which correſponds ſufficiently with the Eſſina of Ptolemy. Eſſina he places under the line, and Brava is only one degree to the north of it; and though little is to be built upon his latitudes, it is remarkable, that his error is greateſt at the commencement of the coaſt, and diminiſhes in its progreſs to the ſouth. At Gardefan it is near ſix degrees, at Cape Baxas it is little more than two, and at Brava it may, by proportion, be reduced to one.

But there is another method of reducing our conjectures to certainty; which is, by taking a proportion of ſix to ſeven; in which caſe, if we fix the termination of the ſix days' ſail at Brava, the concluſion of the remaining ſeven coincides preciſely with Mombaça,

the

the correſpondence of which will be eſtabliſhed by a variety of deductions, ſo as hardly to leave a doubt upon the arrangement.

Within the ſpace which is allotted to this Little and Great Coaſt, amounting nearly to five degrees of latitude, we find only one place noticed on our modern charts, which is Magadaſho[205]. I dare not ſay that this has any relation to the Megas[206] of the Greeks, but I recommend it to the enquiries of the Orientaliſts; for Ma and Maha ſignify *great* in the Shanſkreet and Malay, and in this ſenſe moſt probably enter into the compoſition of Madagaſcar in the neigbourhood. Of Magadaſho[207] farther mention will be made hereafter; but except in the exiſtence of this place, our modern charts are as barren as the Periplûs; even in the abſence of information there is a reſemblance and correſpondence; and as the following diviſion is characterized by ſeven rivers, which are actually found upon the coaſt at preſent, there cannot be an error of any great conſequence in aſſuming Eſſina for Brava[208], and terminating the Great Coaſt of the Periplûs at the ſame place.

SERAPIÔN, NIKÔN, the SEVEN ANCHORAGES at SEVEN RIVERS.

XVII. THE diviſion we are now to enter upon requires more conſideration, as we are approaching to the limits of the journal;

[205] This name is written Macdoſcho and Mocadeſſou by the Arabick authors, Magadoxo and Mogadoxo in the charts.

[206] Ἀιγιαλὸς ΜΕΓΑΣ. I do not ſuppoſe that the Greeks tranſlated, but that they caught at a reſemblance of ſound; but it is very poſſible that Magadaſho is of a much later date.

[207] The river at Magadaſho is ſtyled Nil-de-Mocadeſſon by the Arabs. Lobo. Second Diſſertation, ed. Le Grande.

[208] Stuckius mentions Eſſina as the place where Ariſton built a temple to Neptune, as the boundary of his diſcovery, when he was ſent down this coaſt by Ptolemy, but I find no authority for this aſſertion. According to Diodorus, (vol. i. p. 209. ed. Weſ.) Ariſton does not ſeem to have gone beyond the Bay of Zeyla or Gardefan, and even that is conjecture. If he had reached Eſſina, Strabo would have proceeded as far, but he ſtops at the Southern Horn. See lib. xvi. p. 774. Salmas. Plin. ex. p. 1183. Stuckius, p. 30.

and

and more eſpecially as I am obliged to diſſent from d'Anville, which I always do with diffidence, and which I never do without compulſion, or from the imperious neceſſity of the circumſtances deſcribed. Theſe ſeven rivers, or even a greater number, cannot be a fiction. They may be ſeen in Bertholet [209], in d'Anville's own map, and every good map of the coaſt; and they are the more remarkable, becauſe from Cape Gardefan to Brava, a ſpace of more than ſeven hundred and ſixty miles, water is found at only three places [210], as far as I can diſcover. Among the number of theſe ſtreams muſt be comprehended the mouths of the Quilimancè, or Grand River of d'Anville; it falls into the ſea not far from Melinda by three mouths, or perhaps more, and in the iſlands formed by the diviſion of the ſtream, or in their neighbourhood, we find Patè, Sio, Ampaça, and Lamo, obſcure places, where there was ſome trade when the Portugueſe firſt diſcovered this coaſt [211]. Here d'Anville places the Rhapta of Ptolemy and the Periplûs, neglecting altogether the Pyraláan iſlands and the Menûthias of his author [212], and not obſerving that Rhapta muſt be two days' ſail to the ſouth of the latter. My own deſire is, to aſſume theſe ſpots ſurrounded by the divided ſtreams of the river for the Pyraláan iſlands [213], and to make up the

[209] See ſheet 26. MS. of Reſſende, Brit. Muſ. It is not pretended that the ſeven anchorages can be diſtributed to the ſeven rivers, but there are ſeven rivers or probably more, and the general picture of the tract is all that is contended for as true.

[210] At Bandel d'Agoa, north of Cape Baxas, at Doura an obſcure ſtream where we find Bandel veijo, and at Magadaſho.

[211] Geog. Ancienne, vol. iii. p. 64.

[212] I ſometimes think that d'Anville in this has followed Marmol, who places Rhapta at a river near Melinda, that is, the Obii or Quilimancè, lib. x. p. 146, &c. and p. 208.

[213] I am enabled, from Reſſendè's MS. to give ſome particulars of theſe iſlands, which have eſcaped the reſearch of the authors of the M. Univerſal Hiſtory. Lamo, Ampaça, Pate, and Cio, lie at the different iſſues of the Obii or Quilimancè, in latitude 2° 1′ 0″. The govern-

ment

the number of the ſeven rivers with thoſe ſeparate ſtreams which occur previouſly on the coaſt. The great river which forms theſe iſlands is called the Obii [214] by the Portugueſe: they ſailed up it for ſeveral days, and deſcribe it as a magnificent ſtream: it poſſibly derives its origin from the ſouth of the Abyſſinian mountains, as the Nile flows from the northern ſide, and perhaps gives riſe to a geographical fable of Ptolemy and the early writers, who derive the ſource of the Nile from a lake in the latitude of ſixteen degrees ſouth [215].

The two firſt anchorages of the ſeven are called Serapiôn [216] and Nicôn [217], both in Ptolemy and the Periplûs; and it does not appear clearly from the text of the latter, whether they are to be reckoned incluſive or excluſive. I have taken them ſeparate in the preceding table of the coaſt; but if they are to be included in the number, two days' ſail, or an hundred miles, muſt be deducted

ment of all was in the hands of the Mohamedans, but there was a Portugueſe cuſtom houſe at Patè. Vaſco de Gama firſt made the coaſt of Africa at Patè on his return from India. Ships were not ſuffered to touch here, unleſs the monſoon prevented them from getting to Mombaça. The government maintained three thouſand Moors as ſoldiers. Cio had ſix hundred, and was a piratical ſtate. Ampaça had fifteen hundred, was tributary to the Portugueſe, and much attached to the nation. Theſe were divided by different branches of the river, but Lamo was more ſplendid than the others, had a king of its own, and fifteen hundred Mooriſh troops. It was tributary to Portugal, but no Portugueſe reſided in the city. The trade of all theſe places conſiſted in dates, Indian corn, and proviſions.

[214] See Marmol, lib. x. p. 208, and p. 144. Barboſa, &c.

[215] Ptolemy in 12° 30′ 0″, or 13° 0′ 0″.

[216] Whatever doubt may ariſe about Nicôn, from the fluctuation of orthography, there can be no heſitation in allowing that Serapiôn muſt be the name of an Egyptian, or an Egyptian Greek. Voyagers of this ſort frequently gave their names to ports firſt viſited by them, or had this honour conferred upon them by others; thus we have, in Strabo, the altars or ports of Pitholäus, Lichas, Pythangelus, Leon, and Charimotus, on the coaſt between Mount Elephant and the Southern Horn. Strabo, lib. xvi. p. 769. et ſeq. from Artemidorus. Cicero mentions a Serapiôn as a geographer who contradicted Eratoſthenes. May he not have been a navigator on this coaſt? or might not a place have been ſo named in honour of him by a navigator? See Epiſt. ad Atticum, lib. ii. ep. 6.

[217] Ptolemy writes Niki and To-Nikè: it is only a variation of orthography.

from

from the total, a difference far more excuſable in an ancient journal than a modern one.

Theſe names, evidently derived from the Greeks, afford no means of finding an equivalent for either, but in regard to the ſeven rivers and anchorages, our evidence is complete; this intimation the reader is requeſted to accept for the preſent, till we can preſent him with particulars from the diſcovery of the moderns. The general character of the coaſt is clearly marked by the actual exiſtence of the rivers, and the termination of the ſeven courſes at the Pyraláan iſlands, points to Mombaça almoſt to a certainty.

MOMBACA.

XVIII. The preference due to Mombaça is founded upon a variety of combinations. It has been noticed already, that by the two diviſions of this tract from Apókopa [Cape Baxas] to the Pyraláan iſlands, the proportion of ſix days ſail to ſeven would direct us to Mombaça, and it muſt be obſerved now, that two hundred miles ſouthward would carry us to one of the three Zanguebar iſlands, and another hundred miles added to this would conduct us to the neighbourhood of Quiloa; theſe are the diſtances of the Periplûs to Rhapta, and at Quiloa or Cape Delgado muſt be fixed the limit of diſcovery in the age of the author. In treating of this limit, Quiloa will be generally aſſumed as more conſpicuous, as it is a place of importance, and as it is the ſeat of an Arab government, certainly more ancient than the Periplûs itſelf.

Let us now conſider the peculiar characteriſticks attributed by our author to Rhapta. The place, he ſays, has obtained this name

among the navigators who were Greeks, from the word ῥάπτω, which ſignifies *to ſew*, and was applied to this place becauſe they found here veſſels not built like their own, but ſmall, and raiſed from a bottom of a ſingle piece with planks which where ſewed together[218] [with the fibres of the cocoa,] and had their bottoms paid with ſome of the odoriferous reſins of the country. Is it not one of the moſt extraordinary facts in the hiſtory of navigation, that this peculiarity ſhould be one of the firſt objects which attracted the admiration of the Portugueſe upon their reaching the ſame coaſt, at the diſtance of almoſt fifteen centuries? They ſaw them firſt at Moſambique, where they were called Almeidas, but the principal notice of them in moſt of their writers is generally ſtated at Quiloa, the very ſpot which we have ſuppoſed to receive its name from veſſels of the ſame conſtruction.

RHAPTA.

XIX. "THE inhabitants here are men of the talleſt ſtature and "the greateſt bulk[219], and the port is ſubject to the ſovereign of "Maphartis[220], which is in Yemen, lying between Mooſa and the "ſtraits;

[218] Περιερημένων ῥαπτῶν πλοιαρίων.

[219] A circumſtance noticed alſo by Capt. Beaulieu near Cape Gardefan.

[220] Νέμεται δὲ αὐτὴν κατὰ τὸ δίκαιον ἀρχῶν ὑποτέτακται τῇ βασιλείᾳ τῆς πρώτης γενομένης Ἀραβίας ὁ Μοφαρίτης Τύραννος.

What is meant by τῆς ΠΡΩΤΗΣ γενομένης Ἀραβίας, I dare not pronounce. Dodwell ſuppoſes it to relate to the Roman cuſtom of dividing provinces according to their proximity or date of conqueſt, as Arabia prima, Arabia fecunda: and he obſerves juſtly, that this ſtyle belongs to a later age than what I aſſume, i. e. the reign of Claudius. To this I anſwer, that the Romans never had any province at all in this part of Arabia. They ravaged the coaſt it is true, as they razed Aden, and they collected a tribute as early as the reign of Claudius, as appears by the account of Plocamus's freedman, and ſo did the Portugueſe upon ſeveral

" ſtraits [221]; beſides this power of the king, the merchants of Mooſa
" likewiſe exact either a tribute [222], or demand cuſtom; for they
" have many ſhips themſelves employed in the trade, on board of
" which they have Arabian commanders and factors [223], employing
" ſuch only as have experience of the country, or have contracted
" marriages with the natives, and who underſtand the navigation
" and the language." This mixture of Arabs, Meſtizes, and Negroes preſents a picture perfectly ſimilar to that ſeen by the Portugueſe upon their firſt arrival; and except that another race of Arabs, of another religion, had ſucceeded in the place of their more barbarous anceſtors, and had carried their commerce to a greater extent, the reſemblance is complete.

The Imports here are,

Λόγχη προηγυμένως ἡ τοπικῶς κατασκευαζομένη ἐν Μόσᾳ.	Javelins, more eſpecially ſuch as are actually the manufacture of Mooſa.
Πελύκια.	Hatchets or Bills.
Μαχάιρια.	Knives.

ſeveral coaſts where they had not an inch of territory; but the Romans never had a province on this part of the coaſt of the Red Sea, or on the ocean. If they had an Arabia prima and ſecunda, theſe muſt have been in Petræa, ſouth of Jordan. It is for this reaſon, I think that ΠΡΩΤΗΣ has no relation to a Latin term, but belongs to Yemen, the *firſt* and *principal* ſtate of Arabia Felix, the king of which was Charibael, with whom the Romans always treated, and Maphar or Mopharcites appears to be a territory under that diviſion. See Periplûs, p. 13.

[221] It is a tract in Arabia mentioned next to Mooſa, the capital of which is Sauè; if we might be allowed to read Σάνη for Σάυη, it would be the modern Sana, capital of Yemen, for the Periplûs ſays, it lies three days inland; but this is highly dubious.

[222] Ὑπόφορον αὐτὴν ἔχουσι.

[223] Χρηματῶν.

Ὀπήτια.

Ὀπήτια.	Awls.
Λιθίας Ὑαλῆς πλέιονα γένη.	Crown glaſs of various ſorts.

And to theſe commodities we muſt by no means omit to add a ſtore of corn and wine carried out by the traders, not for ſale, but for the purpoſe of entertainment, and ingratiating themſelves with the natives. This is ſo truly conſonant with the modern ſyſtem of carrying out ſpirits to America, and the coaſt of Africa, that the reſemblance ſhould by no means be ſuppreſſed.

The Exports are,

Ἐλέφας πλεῖϛος, ἧσσον δὲ τῦ Ἀδυλιτικῦ.	Ivory in great quantity, but of inferior quality to that obtained at Adooli from Abyſſinia.
Ῥινόκερως.	Rhinoceros, the horn.
Χελώνη διάφορος μετὰ τὴν Ινδικὴν.	Tortoiſe-ſhell of a good ſort, but inferior to that of India.
Ναύπλιος ὀλίγος.	

The articles of import here are nearly the ſame as an African invoice at the preſent moment; and in the exports it is ſome degree of diſappointment not to find gold. For as the fleets of Solomon are ſaid to have obtained gold on this coaſt, as well as the Arabs of a later age, and the Portugueſe, we naturally look for it in a commerce which is intermediate; and the nearer we approach to Sofala the more reaſon there is to expect it. Our preſent object, however, is not the trade but the geography.

It

It has been already ſtated [224], that the meaſures of the Periplûs accord with the degrees of latitude between Gardefan and Quiloa within five miles [225], a diſagreement upon twenty degrees wholly inſignificant. But if it ſhould be thought that the meaſure by a day's courſe is too vague to ſupport the aſſumption of Quiloa for Rhapta, it may be anſwered, that in a voyage performed both ways, with the different monſoons, and repeated yearly, this eſtimate may be reduced almoſt to a certainty; far more ſo at leaſt than any courſes the Greeks could eſtimate in the Mediterranean. Ptolemy's objection to this will be conſidered in its proper place: for the preſent it is ſufficient to ſay, that the agreement of the meaſures is the firſt principle for the aſſumption of Quiloa; the ſecond is, that the peculiarities of the coaſt coinciding with the detail of the journal all point to the ſame ſpot; the ſeven days courſes terminating each at a river, cannot be applicable to any tract but the coaſt of Melinda, comprehending the mouths of the Obii, and the termination of theſe at Mombaça, which is aſſumed either as one of the Pyraláan iſlands, or as a place ſtrangely marked by the title of the New Canal. One reaſon for placing this at Mombaça is, that a canal implies ſomething on the continent rather than an iſland in the ſea, and the Pyraláan iſlands preceding this ſeem, therefore, naturally to be the ſpots encloſed and divided by the mouths of the Obii, on which Ampaça, Sio, Pate, and Lamo are placed, all marts of later date, correſponding with ſome of the ſeven courſes of the Periplûs. Another reaſon for aſſuming Mombaça is, that it is on an iſland in

[224] See Table, p. 135.

[225] It is not meant to build on this approximation: the charts differ conſiderably, but if it can be reconciled within a degree, or even two, the correſpondence is extraordinary.

a bay

a bay ſeparated from the land by ſo narrow a channel that it is joined to the main by a cauſey at low-water [226]; there is a ſtrong ſimilarity in this to a canal cut, or ſuppoſed to be cut; but a third point we may inſiſt upon, is ſtill more convincing, which is, that neither the Pyraláan iſlands, or the New Canal (whatever it may be) are mentioned as lying at a diſtance from the coaſt, whereas the next ſtation is expreſsly noticed as an iſle three hundred ſtadia, or thirty miles off ſhore.

MENOUTHESIAS.

XX. THIS iſle is the Eitenediommenutheſias of the Periplûs [227], a term egregiouſly ſtrange and corrupted, but out of which the commentators unanimouſly collect Menûthias, whatever may be the fate of the remaining ſyllables. That this Menûthias muſt be one of the Zanguebar iſlands is indubitable [228]; for all three, Pemba, Zanguebar, and Monfia lie nearly at thirty miles from the coaſt, and this character is indelible. Which of the three it may be, ſhould not haſtily be determined, but it can hardly be Pemba, which is the firſt, or moſt northerly, becauſe, if the firſt were touched at the others muſt be paſſed, and ought to have been noticed; neither would the diſtances agree, either from the new canal to Pemba, or from Pemba to Rhapta. Zanguebar as the centre and moſt con-

[226] Marmol, vol. iii. p. 150. Oſorius, vol. i. p. 50. Caſtaneda, p. 22.

[227] See Appendix, No. iii.

[228] Stuckius ſuppoſes the Pyraláan iſles to anſwer to the Zanguebar iſlands, or Zanguebar itſelf; but it is evident the Pyraláans are near the main, and theſe at thirty miles diſtance. If it ſhould ever be found that Pemba, in its various orthography Penda, Pendea, Pendrea, &c. bears any reſemblance in a native ſound or form, to Pyraláan, this queſtion might require farther conſideration; but at preſent I can diſcover no ſuch relation. See Stuckius, p. 31.

ſpicuous

ſpicuous naturally attracts our attention, and Zanguebar is aſſumed by Voſſius in oppoſition to Salmaſius, Stuckius, and a cloud of opponents[229]. Not that we muſt ſuppoſe Voſſius prejudiced in favour of one of theſe iſlands more than another, but that it muſt be one of the three, and ought to be that with which the diſtances of the journal are moſt conſiſtent. The journal is very preciſe on this head, it gives two[230] hundred miles from the New Canal to Menûthias, and one hundred from Menûthias to Rhapta; marking at the ſame time the diſtance of the iſland from the main, and the return of the courſe from the iſland to the continent. A reference to the map will now ſhew that theſe meaſures agree with the courſe from Mombaça to Monſia, rather than Zanguebar, and from Monſia to Quiloa. It will be thought fanciful to ſuggeſt a reſemblance between Monſia[231] and Menûthia; but I cannot reſtrain myſelf from the ſuppoſition, though I ſhould not venture to fix a poſition on ſuch grounds. However this may be, I ſhall now give the deſcription of the iſland from the Periplûs, and leave it for future navigators to determine which of the two iſlands correſponds beſt with the characters that are noticed; theſe are, that it is low and woody, that it has rivers, and abounds with a variety of birds, and with the mountain or land tortoiſe. It has no noxious animals, for though it produces crocodiles, they are harmleſs. The natives

[229] See Salmaſ. Plinian. Exerc p. 1243. Voſſius ad Melam. Cellarius, lib. iv. c. 8. p. 163.

[230] See Table, p. 135.

[231] Greater corrupters of foreign names than the Greeks there cannot be, and the firſt found that ſuggeſted an idea to a Greek, generally led him to find a Greek name, and often to add a Greek tale of mythology to the name. There can be little doubt that Zocotora is a native term of the earlieſt date, but the Greeks turned it into Dioſcorides at the firſt ſtep. Poſſibly Monſia was made Monthia in the ſame manner; poſſibly alſo ſome affinity might ſtill be traced from the natives.

uſe

uſe the Rhapta or ſewen veſſels[232], both for fiſhing and catching turtle, and they have likewiſe another method peculiar to themſelves for obtaining the latter, by fixing baſkets inſtead of nets at the interſtices of the breakers[233], through which the ſea retires, when the tide is going out. Theſe circumſtances, it is probable, will enable ſome future viſitor to determine which of the two iſles we are to call Menûthias; that it is one of them is demonſtrable. There is ſome reaſon for thinking Zanguebar is not *low*[234]; whether Monſia is ſo, no means of information have yet occurred[235], and as to the crocodiles which do no harm, I ſhould have ſuppoſed them to be the very large lizards not unfrequent in theſe latitudes, if I had not obſerved that the journal, when treating of Zocotora, mentions both crocodiles and very large lizards which the natives eat[236]. Crocodiles will hardly be found in iſlands which cannot have rivers of any great extent or depth.

After theſe deductions, there is every reaſon to conclude, that the Menûthias of the Periplûs is fixed indubitably at one of theſe two

[232] Barboſa notices this circumſtance at the Zanguebar iſlands.

[233] Περὶ τὰ στόματα τῶν περάχων.

[234] When Duarte de Lemos invaded Zanguebar in 1510, the natives fled to the *mountains*. Faria, vol. i. p. 158. But, perhaps, if *low* on the coaſt, the iſland may ſtill be called *low*.

[235] By referring to the maps for the form of Monſia, it appears both in Reſſendè and the modern charts like a ſemicircle or horſe ſhoe, encloſing a bay on the weſtern ſide, reſembling thoſe iſlands in the South Seas which Cooke deſcribes as a reef rearing its ſummit above the ſea. From this form I conclude it to be *low*, which is one of the characters of Menûthias in the Periplûs. But I have no poſitive authority to depend on. Reſſendè ſays it is the largeſt iſland of the three, and twenty-five leagues in length. MS. in the Brit. Muſeum, p. 103. et ſeq.

[236] See Peripl. p. 17. Σάυρας ὑπερμεγέθεις. But Herodotus ſays the Ionians called [σαύρας] lizards by the name of crocodiles, lib. ii. Salmaſ p. 873. See alſo Laval's Voyage. Harris, vol. i. p. 703. At St. Auguſtin's bay in Madagaſcar, he ſays, the place was covered with an infinity of large lizards *which hurt no one*.

iſlands,

iſlands, the diſtance from the main is ſuch as to ſuit no other upon the coaſt; for all the modern accounts concur in giving it at eight leagues, which are geographical, and which, compared with thirty Roman miles [237], approach too nearly to admit of a diſpute. This is a point which has employed ſo much pains to ſettle, becauſe the concluſion of the journal, and the limit of diſcovery, depend upon it; for if we are right in Menûthias we cannot be miſtaken in Rhapta. The diſtance from Monfia to Quiloa is as nearly an hundred miles as can be meaſured, and two days courſe of the journal is an hundred miles likewiſe; but we are no otherwiſe determined to Quiloa than as a known place, and from the ſuppoſition that the convenience of the ſpot might have attracted the natives or the Arabs, to fix a city here in the early ages as well as the later. The journal calls it the laſt harbour of Azánia, and the termination of diſcovery. The modern Ajan is bounded at Cape Baxos, or as others ſtate, at the Obii, and the coaſt from thence to Cape Corrientes, comprehending the modern Quiloa, is ſtyled Zanguebar; it is this coaſt which Marco Polo calls the iſland of Zanguebar, to which he gives an extent of two thouſand miles, and in which he is not more miſtaken than Ptolemy in his Menûthias, or in the inclination he gives this continent towards the eaſt. The Periplûs fixes its own limit without monſters, prodigies, or anthropophagi; a circumſtance this, above all others, which gives reaſon to ſuppoſe that the author viſited it himſelf [238]; for the marvellous uſually commences where knowledge ends, and this author indulges

[237] Sixty geographical miles are equal to ſeventy-five Roman. Caſtaneda ſays, ten leagues, p. 67.

[238] Ubi deſinit cognitio, ibi fingendi incipit licentia. Voſ. ad Melam, p. 305.

the ſame paſſion as other writers, when he advances beyond the boundary of his own knowledge in the eaſt; but of this more in its proper place. It is our preſent buſineſs to conſider the ſite aſſumed for Rhapta at Quiloa, with the ſeveral circumſtances that attend it.

The Periplûs always employs the title of Rhapta in the plural, and notices it only as it is a mart or harbour; but Ptolemy has a river Rhaptum on which Rhapta ſtands, and a promontory Rhaptum more than a degree and a half farther to the ſouth. It muſt be obſerved, that this is very much in harmony with the actual ſite of Quiloa, which is on an iſland in a bay at the mouth of the river Goavo [239], with Cape Delgado at the diſtance of ſomewhat more than a degree to the ſouth. D'Anville has aſſumed Delgado for the Praſum of Ptolemy, in which I ſhould not ſo confidently ſay that he is miſtaken, if I had not proved that he has totally neglected the Menûthias of the Periplûs [240], the very point upon which all our poſitions in the neighbourhood depend. But if the Rhapta of Ptolemy and the Periplûs are the ſame, of which there is no doubt, then the circumſtances of Ptolemy apply to Quiloa, and to no other place upon the coaſt. In this opinion I am not ſingular; for Voſſius [241], as he agrees with me in mak-

[239] See the Voyage of Thomas Lopez, in Ramuſio, vol. i. p. 134. Fra. Quilloa nuova e la vecchia e uno fiumo. A proof of more eſtabliſhments than one in this neighbourhood.

[240] D'Anville ſuppoſes the Menûthias of Ptolemy to be Zanguebar. But he does not take into his calculation the ſite of that iſland, or the neceſſity there is for Rhapta being to the ſouth of it.

[241] Menûthias illa eſt inſula quæ nunc Zanguebar appellatur, huic enim omnia conveniunt quæ veteres de Menûthiade ſcribunt, non inſulæ S. Laurentii, quæ plane ignota fuit Græcis ac Romanis, ut plenius alias oſtendamus, Raptum vero promontorium eſt illud quod Quiloa vocatur. Voſſius ap. Cellarium. It will be ſhewn hereafter in what ſenſe Madagaſcar was unknown to the Greeks and Romans. See Cellarius, lib. iv. c. 8. p. 163.

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ing Menûthias Zanguebar, unites alſo in allotting Rhapta to Quiloa.

PRASUM.

XXI. It is now to be obſerved, that Ptolemy [242] in going down the coaſt of Africa, as he has the ſame names with the Periplûs [243], ſo has he the ſame termination at Rhaptum; for his Praſum and *his* Menûthias are thrown to the concluſion of his account of Africa, and do not appear to be collected from any regular journal like this before us; but to be founded upon the report of ſome voyagers who had advanced farther ſouth, in the intermediate time which had elapſed between the date of the Periplûs and that of his own publication. But if it follows from this that the Periplûs is prior to Ptolemy, ſo is there great reaſon to believe, that if he did not follow this journal as low as it went, it was one nearly of the ſame age. The heſitation with which he ſpeaks about all below Rhapta proves that he had no regular data to proceed upon, and however he rebukes Marínus for error in his calculations, which, if adhered to, would have compelled him to carry Praſum to latitude thirty-four degrees ſouth [244], he himſelf has a method by no means more efficacious. Marínus, it ſeems, was upon his guard, and had reduced this exceſs to 23° 30′ 0″ ſouth, or the tropick of Capricorn; but Ptolemy objects to this, as ſtill too diſtant, and reduces Praſum to latitude 15° ſouth, *becauſe*, ſays he, the people there are black, and the

[242] Africa, cap. vii. table iv.

[243] See Table, p. 135.

[244] It is a remarkable circumſtance that this ſhould be nearly the latitude of the Cape of Good Hope, latitude 35° 30 0′. See Ptol. lib. i. c. 9. The whole of Marinus's error is imputed to calculating diſtances by the day's courſe of a ſhip; and the chapter that contains this charge is highly curious, and worth conſulting.

country produces the elephant and the rhinoceros, circumſtances which occur in latitude 15° north in Ethiopia, and conſequently ought to occur again as many degrees ſouth of the equator. This method of fixing a latitude is by no means ſatisfactory to Ramuſio; for he tells us he was acquainted with a Portugueſe pilot who was well read in Ptolemy[245], and who objected very acutely, that if this ground were admitted, the inhabitants of Spain ought to be of the ſame colour with the Hottentots; for the ſtraits of Gibraltar are nearly in the ſame latitude north as the Cape of Good Hope ſouth. Without inſiſting upon this, it is evident that Ptolemy had no data from the journals to proceed on. But when he places Rhaptum in latitude 8° 25′ 0″ ſouth[246], and Praſum in 15° 30′ 0″ ſouth[247], he makes but one ſtep of ſeven degrees, without a feature of the coaſt, or a circumſtance intervening, which might enable us to judge whether the voyage had ever been performed or not; but here we find a nation of Ethiopians or Negro Anthropophagi directly.

MENOUTHIAS, of Ptolemy.

XXII. It is oppoſite to this Praſum, but towards the north eaſt[248], that Ptolemy has placed *his* Menûthias, and at the diſtance of five degrees from the continent; for his Praſum is in longitude 80°, and his Menûthias in longitude 85°. His latitude of Praſum is 15° 30′ 0″ ſouth[249],

[245] As probably all the Portugueſe pilots were in that age.

[246] Latin text 8° 36′ 0″.

[247] Latin text 15° 0′ 0″.

[248] Ἀπὸ θηρινῶν ἀνατολῶν.

[249] Latin text 12°. In the Voyage of Nearchus I had taken the longitudes and latitudes from the Latin text, from a ſuppoſition that it was more correct than the Greek, and of equal authority; for it is not a tranſlation, but ſuppoſed to be taken from an older and better Greek copy. A learned friend corrected ſome of my errors by referring to the Greek, and adviſed me to conſult it more.

his latitude of Menûthias is 12° 30′ 0″. It is from this latitude of 15° ſouth, that the early Portugueſe univerſally aſſume Moſambique for Praſum; and if it were ſo, the Menûthias, five degrees to the eaſt, can be nothing but Madagaſcar. Now it is not neceſſary to aſſert that either of theſe aſſumptions is true; but, true or falſe, it is evident that the Menûthias of Ptolemy is different from that of the Periplûs. The one is oppoſite to Praſum, between 12° and 15° ſouth; the other is north of Rhaptum, and is in 9° ſouth. The one is five degrees, the other is only thirty miles from the continent. Where Praſum is to be placed is an object worthy of inquiry, if there were data ſufficient to determine it, as it is the final limit of ancient diſcovery to the ſouth. I can point out no fitter poſition for it than Moſambique; and if the Greeks did reach that port, they muſt probably have heard of the great iſland. The name of Menûthias was poſſibly aſſigned to it, as the name of the laſt iſland known, like Thulè in the north, or Cernè on the ſouth, for a Cernè is found as the limit of African knowledge both on the weſtern and eaſtern ſide of the continent. Hanno, or at leaſt thoſe who followed him, finiſhed their voyage at a Cernè [250]; and Pliny, as well as Dionyſius, finds another in the Indian Ocean. One of the firſt names by which Madagaſcar was known in Europe was the Iſland of the Moon, poſſibly an Arabian interpretation of Men-ûthias [251]; but Marco Polo calls it Madaſter, an appellation

[250] Hanno went farther; but in the time of Scylax Cernè was the limit. See Mr. Goſſelin's Recherches, tom. i. on this ſubject, to whoſe opinion I do not ſubſcribe.

[251] It is Mn not Mnn, or elſe I ſhould conſider this as certain. The Iſland of the Moon is a term ſent to Europe by Covilham, in his letter to John II. king of Portugal. He ſays this was the name by which the natives called it. This, as attributed to the natives, may be doubted; but it is certainly the term uſed by the Arabs, as appears from Al Edriſſi. Madaſter, the name given by M. Polo, is more likely to be the native appellation. He is the firſt author who conveyed this name to Europe.

which

which it received from the navigators of his age, who where apparently Malays rather than Chineſe; and to that language we ſhould look for the etymology of the term.

XXIII. LET us pauſe at this boundary of ancient diſcovery, and examine briefly the opinions of mankind upon the ſubject. To commence with our author, nothing can be more guarded or unaſſuming than his language. The ocean, he ſays, beyond Rhapta, as yet undiſcovered, ſweeps round with a turn to the weſt; for as it waſhes the ſhores of Ethiopia, Libya, and Africa in their inclination to the ſouth weſt, it joins at laſt with the Heſperian or Atlantic Ocean. This notion is conſiſtent with the general ſentiments of the ancients on this ſubject; and a variety of authors, from Herodotus to Pliny, not only ſuppoſe the communication of the two oceans, but the actual performance of the voyage. If credit were due to any, Herodotus has the faireſt pretenſions[252]; he has certainly no intention to deceive, but was deceived himſelf by the vanity of a nation who ſet no narrower bounds to their geography than their chronology; whoſe kings were gods, and whoſe gods were monſters. The natural propenſity of mankind to aſſert the actual performance of all that is deemed poſſible to be performed, is not confined to Egyptians, Greeks, or Romans. The problem of a north eaſt or north weſt paſſage to the Southern Ocean has been exploded only within theſe ten years; but while it was thought practicable, the pretenders to the performance of it were as bold in their aſſertions as the Egyptians of Herodotus.

[252] Haud alio fidei proniore lapſu quam ubi falſæ rei gravis autor exiſtit. PLINY, lib. v. p. 92.

As the Aragonauts ſailed from the Mediterranean by the Palus Meotis[253], and the Tanais[254] into the Hyperborean Ocean; or as others are ſaid to have come from India north about by Tchutſkoi[255], and through the Wolga into the Caſpian Sea and Hyrcania. So in a more recent age have we an hiſtory of a ſhip called the Eternal Father[256], commanded by Captain David Melguer, a Portugueſe, who in the year 1660 ran north from Japan to latitude 84°, and then ſhaped his courſe between Spitſbergen and Greenland, by the weſt of Scotland and Ireland, till he reached Oporto. We have a Captain Vannout, a Dutchman, who affirms that he paſſed through Hudſon's ſtraits into the South Sea. Another Dutchman who ſailed in an open ſea under the North Pole, and a John de Fuca who ſailed from the South Sea into Hudſon's Bay. All theſe accounts have been reported and believed in their ſeveral ages, convicted as they now are of falſehood or impoſſibility, and traced, as they may be, to error and amplification. To this ſpirit of vanity it is doubtleſs that we may refer the Perſian Fable of the voyage of Scylax; the Egyptian boaſt of the circumnavigation of Africa; the Grecian vanity concerning the ſame achievement by [257] Eudoxus and Magus[258]; and the ignorance of Pliny in carrying Hanno from

[253] Pliny did not quite think this impoſſible, lib. ii. c. 67.

[254] The Sea of Aſoph and the Don.

[255] Strabo, xi. p. 518. Ὅτι δὲ δυνατὸν, Πατροκλῆς εἴρηκε. See Pliny, lib. ii. c. 67.

[256] Perouſe's Voyage, vol. ii. p. 193. Eng. ed. octavo.

[257] Thoſe who wiſh to ſee the mendacity of Eudoxus, and the credulity of Poſidonius ſet in their true light, may conſult Strabo, p. 101.

[258] I am not certain whether Magus be a proper name or not, but he is one of the pretenders to this circumnavigation, mentioned by Strabo from Poſidonius, lib i. p. 32 ſent by Gelo of Syracuſe, and conſidered as an impoſtor by both.

Carthage to the Red Sea, notwithſtanding his own journal was extant, which ſhews that he never paſſed the equator [259].

Nothing is more eaſy than to affirm the accompliſhment of theſe great attempts, where an author clogs himſelf with neither circumſtances or particulars; but whenever we obtain theſe, as we do in the journal of Nearchus or the Periplûs, we find indeed that the ancients performed great things with ſlender means; but we ſee plainly alſo what they could not do. We ſee, with ſuch veſſels as they had, they could neither have got round the Cape of Good Hope, by adhering to the coaſt, where the ſea and the currents muſt have been inſupportable, nor could they have avoided theſe by ſtanding out to ſea, as they had neither the means nor the knowledge to regain the ſhore if they had loſt ſight of it for a ſingle week. It does not appear in the whole hiſtory of ancient navigation, that any voyage was performed either in the Mediterranean or on the ocean by any other means than coaſting, except the voyages from Arabia and Africa to India, and back again by the Monſoons. It does not appear that there was any ſort of embarkation known in the world which was fit to encounter the mountainous billows of the ſtormy Cape [260]. Hiſtory ſpeaks of no veſſels fit for the ocean but thoſe which

[259] Campomanes places the Gorillas at St. Thomas under the equator, but probably without ſufficient authority.

[260] The ſame report which was made to M. Polo, concerning the violence of the ſea beyond Cape Corrientes, is to be found in almoſt all the Oriental writers. In the following quotation we have the evidence of two. De fluctibus hujus maris res prorſus ſtupenda narrantur. Inquit Al Sherif Al Edriſſi ibi fluctus multiplex aſſurgit inſtar totidem montium reciprocatorum, qui fluctus nequaquam frangitur; eoque naves deferuntur ad inſulam Kambalah, quæ in prædicto mari ſita ad Al Zang [Zanguebar] pertinet, incolæ ſunt Moſlemi. Abul feda, in verſione Gagnieri. MS. in Bodleianâ Bibl.

We here learn that there were Arabs, Mahomedans on the coaſt of Zanguebar, that there was a trade thither from Arabia or the Red Sea, and that the navigation beyond was unattempted

which Cæſar deſcribes on the coaſt of Bretagny; and if the Phenicians came to our iſland for tin, aſſuredly it was a ſummer voyage. The veſſels of the Mediterranean were unfit for this ſervice, not ſo much from their ſize as their built; and if it is obſerved that Solomon and the Phenicians traded in the Red Sea, and down the coaſt of Africa, perhaps as low as Sofala, it muſt be conceded, alſo, that veſſels built at Ezion Geber could not be large, and that the danger of the voyage, as far as they proceeded, was attended with a terror, that perhaps nothing but the Phenician thirſt of gain could have ſurmounted. This terror Bruce has noticed with much acuteneſs. The priſon, the ſtraits of burial, the port of death, and the gate of affliction, he remarks, are names given to the marts in the courſe of this navigation; and if ſuch was the alarm upon the mind of the ſeamen, when they viſited this tract in the favourable ſeaſon of the monſoon, what muſt it have been if they had attempted to paſs Cape Corrientes [261], and had launched at once into the ocean which ſurrounds the extremity of Africa. Cape Corrientes (ſo called from the violent currents formed by the preſſure of the waters through the narrow channel between Madagaſcar and the main [262],) was the boundary of Arabian navigation when Gama firſt came upon the

unattempted on account of the mountainous ſea. See Al Edriſſi, p. 28, et ſeq. who mentions beyond Sofala, Tehna where there is a hollow mountain, whence the waters ruſh with a tremendous roar, and a magnetick rock which draws the nails out of ſhips. Some other places to the ſouth are mentioned, but with great obſcurity, as Saion, Daudema, Gaſta, Dagutta, and Ouac-Ouac, the termination of all knowledge on the coaſt of Africa, and indeed of all the geographical knowledge of the Arabs, p. 34. Such is the account of Al Edriſſi, who wrote anno 548, Hegiræ, or 1153, about a century before M. Polo, and apparently about 500 years after the decline of the Greek and Roman commerce from Egypt.

[261] Facile homines abſtinere ſolent ab iis locis unde vel nullus vel difficilis ſit regreſſus. Voſſius ad Mel. p. 595.

[262] Marmol deſcribes not only the currents, but iſlands, ſhoals, and the moſt violent winds that are known. Vol. iii. p. 106.

coaſt;

coaſt; whether the Phenicians, Egyptians, Greeks, or Romans ever reached ſo far may well be doubted, if they did, the Praſum of Marínus and Ptolemy may as properly be placed there as at Moſambique, but that farther they did not go is certain[263]. The Arabs knew the coaſt earlier, later, and longer than all of them united; they were ſettled here while the others were tranſient viſitors, and they had the opportunity of obſerving the ſeaſons, winds, and currents; and what they did not dare attempt, no nation, unleſs poſſeſſed of ſuperior ſkill, power, or reſources, can be ſuppoſed to have accompliſhed.

XXIV. But from argument let us come to facts, and bold as the preſumption may appear, it is not too bold to aſſert, that there is no evidence of a farther progreſs to the ſouth, on the weſtern coaſt of Africa, than that of Hanno, nor on the eaſtern, than that of the Periplûs. In aſſerting this, if I detract from the authority of Heródotus, Diodôrus, Ptolemy, Juba, and Pliny, it is a detraction conſiſtent with the moſt perfect veneration of thoſe great and illuſtrious authors, for they have all followed the reports of others, while the authors of the Periplûs and Hanno ſpeak from their own experience. It is from reports of others that we hear of a Cernè, and a Southern Horn, on both ſides of this vaſt continent. Theſe names were, in the reſpective ages, the ne plus ultra of knowledge on both ſides; and whoever failed, either from the Red Sea, or the Mediterranean, arrived at theſe points, as Columbus arrived at the *Indies* by taking a courſe directly oppoſite to Gama. The

[263] Rien n'étoit ſi peu avéré chez les anciens, comme on en juge par Ptolemée, que le récit qu' on faiſoit de quelques navigations qui avoient tourné le continent de l'Afrique par le Midi. D'Anville, Geog. anci. tom. iii. p. 68.

Southern

Southern Horn of Ptolemy, on the eaſtern coaſt, is in latitude 4° 50′ 0″ north, and the extreme point of Africa[264], is nearly in 35° ſouth, making more than thirty-nine degrees difference; the Southern Horn of Hanno, on the weſtern coaſt, is in latitude 7° north, making two and forty degrees from the ſame extremity; but if we take both together, reckoning eighty-one degrees from one Southern Horn to the other, this is a ſpace that Pliny reduces as it were to a point, and conſiders the junction of the Atlantick Ocean, as taking place almoſt inſtantly; Juba takes a much bolder flight, and reckons the commencement of the Atlantick Ocean from the Bay of Moſyllon, annihilating by this method, if it were poſſible, the immenſe triangle of this vaſt continent[265], and bringing his own Mauritania almoſt in contact with Arabia. The particular attention of all who are curious on this ſubject is requeſted to this point, for it is upon conceptions equally erroneous as this, that too many of the ancients ſuppoſed the circumnavigation of Africa as poſſible as the doubling of Málea or Lilybêum. And this ſuppoſition of the poſſibility produced the belief of the performance. Pliny is ſelf-evidently chargeable with this miſconception, and Heródotus had probably no means of information by which he could form a judgment of the extent of Africa to the ſouth.

It is on this ground above all others that we may aſſert, that the author of the Periplûs viſited Rhapta in perſon; he had not heard of Praſum, a proof that the account of it is poſterior to his age; he takes no notice of the circumnavigation ever having been accompliſhed, a proof that he knew nothing of Heródotus, or did not

[264] Cape Agulhas.

[265] By conſulting the map inſerted in the Variorum edition of Pomp. Mela, by Js. Gronovius, it will be ſeen that this is a fact.

believe his report; and he ſays nothing of Cernè, which is a proof that the miſtake attending it, commenced from the Mediterranean and not from the Red Sea. That the general tendency of the coaſt was ſouth weſt he ſaw as far as he went, and that it continued ſo, he might collect from the natives or the Arabs, or he might conclude the union of this ſea with the Atlantick, from conſidering that converging lines muſt meet. But whatever ſource of intelligence he had, that he ſhould mix nothing marvellous or extravagant with the termination, is a merit that few geographers in the ancient world can boaſt.

The facility with which Pliny [266] carries his navigators round the world is rather magical than falſe; he annihilates ſpace, and ſinks continents under the ſea. He ſuppoſes that the Macedonians in the time of Seleucus and Antiochus, ſailed from India into the Caſpian Sea, and that the whole Hyperborean Ocean was all but explored [267] quite round to the north of Europe. The circumnavigation of Africa is effected with equal celerity; for this was accompliſhed not only by Hanno [268] from Gades to Arabia, and by Eudoxus from Arabia to Gades; but long before Eudoxus, Celius Antipater had ſeen a merchant who ſailed from Gades to Ethiopia. Nothing can be ſo unfortunate as theſe aſſertions; for we have Hanno's [269] own account to prove he never was within forty degrees of the cape, and Strabo's authority to prove, that Eudoxus never came from Egypt to Gades by the ocean, but by the Mediterranean; and that full

[266] Lib. ii. c. 67.

[267] Parvoque brevius quam totus, hinc aut illinc ſeptentrio eremigatus. Ibid.

[268] Pliny mentions the commentaries of Hanno, lib. v. c. 1. but almoſt as if he had not ſeen them, and certainly as if he did not believe them.

[269] This is ſo readily admitted by common inquirers, that Mickle in his tranſlation of the Luſiad ſays: "Though it is *certain* that Hanno "doubled the Cape of Good Hope." p. 2.

as

as his mind was of attempting the voyage, the attempt if made would have commenced from Gades, if he had found protectors to patronize his undertaking [270]. Of Celius Antipater we can say nothing, but if he did meet with a merchant who had sailed from Gades to Ethiopia, it was certainly not the Ethiopia south of Egypt, but that on the western coast of Africa. No merchant or merchantship could have performed a voyage which the greatest potentates must have attempted in vain. But the most extraordinary circumstance still remains, which is, that there is in this place no mention of Heródotus [271], or the voyage he attributes to the Phenicians in the reign of Necho. This is the more remarkable as the account of Heródotus has strongly the semblance of truth, while Hanno and Eudoxus never pretended to the honour of the achievement themselves, nor was it ever imputed to them by any one who was acquainted with their real history, their situation, object, or designs.

It is with great reluctance that I controvert the testimony of Heródotus, for it is no light offence to question historical facts upon evidence of mere speculation. It must be confessed likewise, that the facts he gives us of this voyage, though few, are consistent. The shadow falling to the south, the delay of stopping to sow grain and reap an harvest, and the space of three years employed in the circumnavigation, joined with the simplicity of the narrative, are all points so strong and convincing, that if they are

[270] Strabo, p. 101, 102, where he allows the voyage to India, but refuses all credit to Eudoxus. Euergetes, [IId.] he says, could not want guides to India, there were many in Egypt; which is true, so far as single persons and single ships had reached India. This question will be examined in Book IV.

and so fond of placing it in an early age, that he sees no difficulties in his way; and he proceeded so much upon hypothesis that he neglected history. He knows so little of the voyage of Nearchus, that he makes him sail along the coast of Ariana instead of Mekran, and come up the Gulph of Arabia instead of Persia. See vol. i. p. 456 and 470.

[271] Bruce is so full of an East India trade,

insisted

inſiſted upon by thoſe who believe the poſſibility of effecting the paſſage by the ancients, no arguments to the contrary, however founded upon a different opinion, can leave the mind without a doubt upon the queſtion. That different opinion I confeſs is mine, but I wiſh to ſtate it with all deference to the Father of Hiſtory, and with the profeſſion that I am ſtill open to conviction, whenever the weight of evidence ſhall preponderate againſt the reaſons I have to offer.

I allow with Monteſquieu, that the attempt commenced from the eaſtern ſide of the continent, preſents a much greater facility of performance than a ſimilar attempt from the weſt; for we now know that both the winds and currents are favourable for keeping near the coaſt from the Moſambique Channel to the Cape; and that after paſſing the Cape from the eaſt [272], the current ſtill holds to the northward up the weſtern coaſt of Africa. But the prodigious ſea, raiſed by the junction of the two oceans, almoſt perpetually, and at every ſeaſon of the year, is ſuch, that few of the fleets of Portugal, in their early attempts, paſſed without loſs; and the danger is now avoided only by ſtanding to the ſouth [273]. The latter means of ſafety could not have been adopted by the Phenicians, they could not ſtand out to ſea; and if they adhered to the coaſt, by all that we can now judge from the conſtruction of ancient veſſels, ſhipwreck muſt have been inevitable.

But to omit theſe conſiderations for the preſent, let us obſerve, in the firſt place, that the actual performance of this voyage ſtands upon a ſingle teſtimony, and of all the circumnavigations affirmed,

[272] See Forreſt on the monſoons, p. 10. 13.

[273] In attempting which, ſeveral ſhips have fallen in with the Ice Iſlands ſo graphically deſcribed by the illuſtrious Cook.

this

this is the only one which will bear an argument. If it took place in the reign of Necho, Heródotus lived an hundred and ſixty years after the fact[274], and received the account from the Egyptians. That Heródotus did receive the account, muſt be indubitably admitted. His general veracity is a ſufficient voucher. But that the Egyptians deceived him is an imputation which he does not ſcruple to inſtance in ſome other particulars, and of which we have the moſt undoubted evidence at this day. If we take the date of Necho's reign in 604, A. C.[275], and allow that he was a ſovereign attached to commerce, (as appears by his attempt to make a canal from the Nile to the Red Sea,) it will be readily granted that he muſt be acquainted with the navigation of that ſea, and the commerce carried on there, and on the coaſt of Africa beyond the ſtraits by his own ſubjects, by the Arabians or the Tyrians. The Egyptians had probably the leaſt ſhare in this, but the trade itſelf is to all appearance as old as Thebes, and the cauſe of its ſplendour and aggrandizement. That it was proſecuted by Solomon[276], Hiram, and Jehoſaphat we know hiſtorically; and that it was enjoyed in all ages by the Arabians in ſome form or other, there is every reaſon to believe from the commodities found in Egypt, Paleſtine, and Europe. Theſe cauſes, and the teſtimony which Agatharchides bears, that the gold mines on the coaſt of the Red Sea were worked by the native kings of Egypt, prove that Necho might wiſh to extend his knowledge down the coaſt of Africa to its termination, and that he might conſequently ſend a Phenician fleet to the ſouthward for that

[274] The voyage ordered by Necho is placed by Blair about ante Chriſt. 604
Heródotus read his hiſtory 445
159

[275] His reign begins in 616, and ends in 601. Blair.

[276] Solomon died in 980, A. C. Jehoſaphat in 889 Necho is near 300 years later.

purpoſe.

purpoſe. But that they executed their commiſſion is not quite ſo eaſy to believe. Had this fleet no difficulties to encounter, becauſe we read of none but the want of proviſions? Can we ſuppoſe the Phenicians ſo ſuperior to the Greeks in the art of navigation, as to have no dread of paſſing the greateſt promontory in the world, when Nearchus and his officers ſhuddered at Muſſendon, and dare not attempt Raſ-el-had? Can we believe that Phenicians who had never croſſed the Indian Ocean were bolder mariners than the Arabians, who truſted themſelves to the monſoons? and yet the Arabians never dared to try the Moſambique current, during their neighbourhood to it for fourteen hundred years, while theſe Phenicians launched into it at firſt ſight? To them the terrors of the ſtormy cape were no barrier, and the promontories on the weſtern coaſt of the vaſt continent no obſtacle. Were all theſe which the Portugueſe ſurmounted only by repeated attempts, and by a perſevering ſpirit exerted for almoſt an hundred years, to be paſſed by Phenicians on their firſt expedition, and in the courſe of a few months? Raiſe them as we pleaſe above Greeks, Romans, and Arabians in ſcience, they were doubtleſs inferior in courage to them all. And whatever ſcience we allot them, the ſmalleſt bark could have been conducted by the knowledge of a Portugueſe pilot in greater ſafety, than the largeſt veſſel ever fitted out of Egypt. Some admirers of the ancients, not content with ſuppoſing the execution of ſuch a voyage, are willing to give them the means, by furniſhing them with the compaſs, and other nautical inſtruments; theſe, it is ſaid, were found in the poſſeſſion of the Arabians, at the time the Portugueſe firſt came into the Indian Ocean, and that they were afterwards met with in India and China. The fact is true, but

this was in the latter end of the fifteenth century, and the compaſs is ſaid to have been known in Europe early in the thirteenth [277]; it had therefore paſſed from Italy into Egypt, and from Egypt to the Red Sea. But this argument, if it could be ſupported, would effectually contradict the hypotheſis it is brought to ſupport; for it would prove, that the Arabians of Moſambique, who really poſſeſſed theſe inſtruments, had never been enabled by them, nor ever dared to paſs ſouthward of Corrientes in their neighbourhood, while the Phenicians had actually circumnavigated the whole continent. Now, if the Phenicians had not the compaſs, how could they perform what was with difficulty performed by it? If they had it, how happened they to perform ſo much more by it in an early age than the Arabians in a later? But this queſtion has been ſet at reſt by Niebuhr, Mickle, and ſir William Jones, who ſhew that the Arabian [278], Indian, and Chineſe compaſs is formed from that of Europe.

But let us now examine the text of Heródotus. The narrative of this voyage is introduced in a paſſage where he is giving the limits and extent of the three continents, and here he ſays, that Neco proved Africa to be ſurrounded by the ocean from the completion of this voyage. One expects, however, to hear of the officer who commanded; it was at leaſt as great an exploit as any which the fabulous navigators had achieved. Seſonchoſis, the Oriental Bac-

[277] Arbuthnot, p. 280. from Fauchet and Guyot de Provence.

[278] The Arabick name for the compaſs is Buſſola, evidently Italian. Concerning the Chineſe inſtrument there is ſome obſcurity; but it was ſo mean a tool that it is hardly worth diſcuſſing. The probability is, that the Malays had it from the Arabs, and the Chineſe from the Malays. But the Chineſe themſelves claim the invention 1120 years before the Chriſtian era; and from China ſome ſay it was brought by Marco Polo, but he does not mention it himſelf, and it is therefore moſt probably a fiction.

chus, and Hercules, whatever might be the extent of their victories, peregrinations or voyages, fell far ſhort of this, and they were immortaliſed; while among the Greeks, Jaſon, who ſailed little more than ſeven hundred miles, was himſelf worſhipped as a hero, and had his ſhip tranſlated to the ſphere. How happened it then that the greateſt diſcovery which the world admits, ſhould confer no honour on the diſcoverer? The name of Sataſpes ſtill lives in the ſame page of Heródotus, whom Xerxes put to death becauſe he attempted the ſame circumnavigation in vain, from the ſtraits of Gades; and the following page celebrates Scylax of Caryanda who paſſed from the Indus into the Gulph of Arabia, to the point from whence the Phenicians had commenced their expedition. I have as little faith in the voyage of Scylax as in that of the Phenicians; but it is unjuſt that Darius ſhould ſuffer the name of the inferior to ſurvive, while Neco ſhould totally ſuppreſs the fame of the ſuperior. The great argument againſt both is the total failure of all conſequences whatſoever, the total want of all collateral evidence, and the total ſilence of all other hiſtorians but thoſe who have copied from Heródotus. And in his account the narrative cloſes with a ſentence, which if it were not otherwiſe interpreted by his moſt excellent and learned editor, I ſhould conſider as throwing a tint of ſuſpicion over the whole [279].

The ſentence in one view ſeems to intimate that the Carthaginians had circumnavigated Africa as well as the Phenicians; and if that be its

[279] The paſſage is, Μετὰ δὶ Καρχηδόνιοί ἱσι οἱ λέγοντες ἐπὶ Σατάσπης γε ὁ Τιάσπιος· which Pauw reads οἱ πλέοντες, and which Weſſeling calls an hariolation, but adds, Carthaginienſes enim ſimilibus defunctos navigationibus, tentaſſe oras Africæ Atlantico mari aſperſas, de Sataſpe nihil eos noviſſe. *Quæ docti viri conjectura habet, quo ſe commendet*, lib. iv. 298. But he renders it otherwiſe himſelf, and very harſhly: Larcher follows Weſſeling.

real

real import, it can only allude to the voyage of Hanno [280], which might have been deemed a circumnavigation in the age of Heródotus as readily as in the age of Pliny; and if ſo, it would invalidate the Phenician account as much as the Carthaginian; for if the Carthaginian voyage were falſe, as we know it is, the Phenician could hardly be true.

This argument, indeed, is not to be inſiſted on, nor the oblivion to which the name of the commander is conſigned, but the difficulties of the voyage itſelf, the want of means to ſurmount them, the failure of conſequences, and the ſilence of other hiſtorians, are objections not to be ſet aſide without ſtronger evidence on the other ſide than has yet been produced.

But as it is not in our power to prove a negative, let us now examine the poſitive teſtimony of other authors in oppoſition to that of Heródotus. The author of the Periplûs ſays directly, that the ocean never was explored on the eaſtern ſide to the point of Africa. Hanno gives no intimation of any one having ſailed farther than himſelf on the weſtern ſide, and Scylax [281], who traces the Carthaginian commerce to Cernè, maintains not only that the ſea to the ſouthward was unexplored, but that it was not paſſable [282]. The laſt author we ſhall adduce is Ptolemy, who certainly muſt have

[280] Weſſeling doubts very juſtly whether the voyage of Hanno is prior to Heródotus. I can affix no date to it, but am not ſatisfied with Campomanes's date. Olym. 93. Voſſius thinks it prior toHomer. Strabo, p. 48. ſpeaking of the African voyages of the Carthaginians ſays, Μικρὸν τῶν Τρωικῶν ὕστερον.

[281] The work which bears his name.

[282] Though this is not true, yet his mention of the weeds which obſtruct the paſſage is a circumſtance which d'Anville has ſeized to prove the reality of theſe Carthaginian voyages to the ſouth. Such weeds do occur, and do impede a ſhip's way, if ſhe has not rather a briſk wind. If the latitude where theſe weeds commence can be determined, it may throw a new light on theſe voyages of the Carthaginians.

been acquainted with Heródotus, however ignorant we may ſuppoſe Hanno, Scylax, or the merchant of the Periplûs. And Ptolemy is ſo far from believing the report of Neco or the Egyptians, that he not only ſuppoſes the voyage never performed, but declares it impoſſible; that is, he brings round the continent of Africa unbroken with a ſweep to the eaſt, till he makes it join the continent of Aſia to the eaſtward of the Golden Cherſoneſe.

Falſe as this hypotheſis may be, it is ſtill a contradiction direct to Heródotus; for though it proves that he was himſelf ignorant of every thing beyond Praſum, it proves likewiſe that he believed all pretenſions to a progreſs farther ſouth fabulous; and that where all knowledge ceaſed he had a right to an hypotheſis of his own as well as others. D'Anville ſuppoſes that Ptolemy aſſumed this ſyſtem from the prevailing idea among the ancients, that there ought to be Antipodes in the ſouth, correſpondent to thoſe of the northern hemiſphere. Perhaps alſo a counterbalance of continents was as favourite a notion in the early ages as in modern. But however this error originated, the concluſion of d'Anville is remarkable [283]: "Nothing," ſays he, "was leſs aſcertained among the ancients, if we may judge "from Ptolemy, than the account of ſome voyages which were ſaid "to have been effected round the continent of Africa by the ſouth." And parallel to this is the opinion of Voſſius [284]: "Certain it is, "whatever may be ſaid to the contrary, that the ancients were ſo "far from paſſing the Cape of Good Hope, that they never ap-"proached it." Both theſe opinions are likewiſe ſupported by Strabo [285], who ſays, "that all who have attempted this navigation "either from the Red Sea or the Straits of Gades, have returned"

[283] Geog. Aneien. tom. iii. p. 68. [284] Voſſius ad Melam, p. 303. [285] Lib. i. p. 32.

[without effecting their purpoſe]; and yet Strabo, while he aſſerts this, is as perfectly aſſured that Africa was circumnavigable, as Heródotus. In giving theſe opinions of Ptolemy, Strabo, and d'Anville, I feel myſelf ſupported by the greateſt authorities ancient and modern; it is hoped, therefore, that the argument here aſſumed will not be thought preſumptuous, more particularly as it derogates not ſo much from Heródotus, as from the information he received in Egypt.

PTOLEMY.

XXV. It has been already ſhewn by the table [p. 135.] that there is a general correſpondence between Ptolemy and the Periplûs, and their diſagreement in particulars is not imputable to the authors themſelves, but to the age they lived in. In that age the geographer did not navigate, and the navigator had no ſcience[286]. The geographer reckoned by degrees without obſervation[287]; the navigator reckoned by his day's courſe. Modern navigators correct their dead reckoning by obſervation; but in the early ages ſcience and practice had little connection: and yet ſo far from their being any charge of error or negligence in this, that it is exactly the reverſe. We are not to condemn the miſtakes of Ptolemy in longitude or latitude, but to revere the ſcience, which applied the phenomena of the heavens to the meaſurement of the earth. The navigator of the preſent hour is conducted on principles firſt eſtabliſhed by

[286] Every ſeaman knows that his dead reckoning amounts to nothing till it is corrected by obſervation.

[287] Ptolemy, lib. i. c. 9. tells us expreſsly that he had no accounts to be depended on, ὡς ὄυσης δὶ τοιάυτης ἱστορίας, and therefore collected his latitudes from ſimilar productions in the oppoſite hemiſpheres.

Ptolemy. The errors of his maps can no longer miſlead, while his principle muſt be of the ſame duration as navigation itſelf. I call the principle Ptolemy's, becauſe he fixed it and brought it into uſe. Thales and Anaxagoras knew that the world was a ſphere. Eratoſthenes drew the firſt parallel of latitude at Rhodes, and firſt meaſured a degree of a great circle upon the earth; Hipparchus taught that the meaſurement of the heavens was applicable to the earth. And Dióſcorus and Marínus are both ſaid by Ptolemy to have delineated maps on principles ſimilar to his own; though we may judge what theſe were, when he ſays that Marínus had the latitude of ſome places and the longitude of others, but ſcarely one poſition where he could aſcertain both. But if Ptotemy objects to the method of Marínus, we are compelled to object to the method Ptolemy uſed to correct it; for he ſays, that in going down the coaſt of Africa, Marínus reckoned by the days' courſe of the voyagers, and finding theſe carried Praſum to 35° ſouth, he ſhortened the eſtimate, and placed that promontory under the tropick of Capricorn. He then enters into a long argument to prove the inſufficiency of this ſtandard, and forms another for himſelf, by conſidering the productions of nature as ſimilar, at equal diſtances, on both ſides the equator; a ſtandard certainly not leſs vague; and yet on this ground, and no other, he fixes Praſum in latitude 15° ſouth. Now there is a very remarkable coincidence attends the concluſion of both theſe geographers; for the Praſum of Ptolemy is preciſely at Moſambique, and that of Marínus at Cape Corrientes; and it is ſtill more extraordinary that Moſambique ſhould be the laſt *** of the Arabian ſettlements in the following ages, and Corrientes the limit of their knowledge.

*** There were Arabs lower down at Sofala, but Moſambique may well be ſtyled the laſt of their colonies.

From

From all the evidence I can collect, and all the circumſtances I can combine, I find it impoſſible to aſcertain the ſite of Praſum [289]; but I have no heſitation in carrying it farther to the ſouth than d'Anville does, or in fixing Corrientes as the fartheſt poſſible boundary to all the knowledge of the ancients. The detail of Ptolemy goes to Rhaptum and no farther; ſo far he had journals, and the relation of navigators to conduct him; beyond that, the voyage did not in its regular courſe extend; and if ſingle veſſels had at any time been carried to Praſum, by the winds and currents, it was accidental. But it ſhould ſeem that it was heard of from the natives, or the Arabs, rather than ſeen, as all circumſtances and particulars end with Rhaptum; and the remainder conſiſts of a ſingle ſtep to Praſum, that is, near ſeven degrees, without mention of a port, an anchorage, or a ſingle feature of the coaſt.

One thing, however, is certain, that the name of Praſum is familiar to Marínus, who is prior to Ptolemy, and is not known to the author of the Periplûs. If, therefore, Ptolemy lived in the reign of Adrian, and we have an intervening writer between him and our author, we cannot err more than a very few years in aſſigning the date of the Periplûs to the latter end of the reign of Claudius, or the beginning of that of Nero. There is a Diodôrus Samius mentioned in Ptolemy from Marínus, who notices the courſe held by veſſels from the Indus to the coaſt of Cambay, and from Arabia to the coaſt of Africa [290]. He aſſerts that in the former voyage they

[289] There are ſome coincidences ſo extraordinary, and ſome contradictions ſo ſtrong, that the choice is wholly at a ſtand. Ptolemy condemns Marínus for making five thouſand ſtadia, i. e. five hundred miles between Rhaptum and Praſum; and yet he himſelf makes it ſeven degrees, which is almoſt the ſame thing. But if they agree in this, their difference is ſtill irreconcilable; for Marínus's Praſum is in 23° ſouth, and Ptolemy's in 15°. Marínus's line of coaſt tends directly to the ſouth or ſouth weſt, Ptolemy's to the eaſt. Ἀπὸ δὲ ἀνατολῶν τῷ Ῥάπτῃ Ἀκρωτηρίῳ, p. 115.

[290] Ptolemy, lib. i. c. 9. Azánia the coaſt below Cape Gardefan.

ſailed

ſailed with the Bull in the middle [291] of the heavens, and the Pleiades on the middle [292] of the main yard, in the latter that they ſailed to the ſouth, and the ſtar Canobus, which is there called the Horſe. I can find no mention of this Diodôrus Samius in any other author; but whoever he is, if the date of his work could be fixed, it would go farther to aſcertain the progreſs of the ancients, the navigation of Hippalus, and the account of the Periplûs, than any diſcovery I have been able to make. I have reaſoned only from the materials before me; and if future inquiry ſhould develope Diodôrus, it is not without great anxiety that I muſt abide the iſſue of the diſcovery.

Another circumſtance highly worthy of attention is the argument of Ptolemy [293], to invalidate the eſtimate of a day's courſe. The uſual eſtimate he ſtates at five hundred ſtadia for a day, and a thouſand for a day and night; he then mentions, from Marínus, a Diógenes who was one of the traders to India, and who, upon his return, in his ſecond voyage, after he had made Arômata [294], was caught by the north eaſt wind, and carried down the coaſt for five and twenty days, till he reached the lakes from whence the Nile iſſues [295], that

[291] Μεσηραιῶντα.

[292] Κατὰ μέσην τὴν κεφάλαιαν.

[293] See lib. i. c. 9.

[294] It may be proper to examine the monſoon upon this queſtion.

[295] That there is a great lake inland from the coaſt of Ajan, is a report of which we find traces in almoſt all the accounts ancient or modern; but where to fix it, or what it is, ſeems by no means aſcertained. D'Anville notices ſuch a lake on his map of Africa, and conjectures that it may be the ſource of the Obii, which iſſues at Ampaça and Patè. Ptolemy here makes it the origin of the Nile, and places it in 10° ſouth *, and the Nubian geographer carries to 16°, which is the latitude of the Lake Maravi, while the ſource that Bruce viſited is in 12° north. Two and twenty degrees is ſurely too great a difference to ſuppoſe between the head of the White and the Blue River: neither is it probable that any ſource of the Nile ſhould be ſouth of the mountains of Abyſſinia, which Rennel now ſays are part of the great Belt that di-

* The lakes in Ptolemy are from 7° to 10° ſouth. The ſources of the Nile are in 13° ſouth.

vides

that is, nearly to Rhaptum [296]; he then adds, that Marínus mentions one Theóphilus who frequented the coaſt of Azánia, and who was carried by a ſouth weſt wind from Rhapta to Arômata in twenty days. From theſe facts [297] Ptolemy argues, that as five and twenty days are attributed to the ſhorter courſe, and twenty to the longer, there can be no ſtated meaſure of a day's courſe to be depended on. I muſt own that to my conception they prove exactly the contrary; for though a day's courſe is certainly indefinite, where winds are variable, we now know that both theſe voyagers muſt have beencarried by the two oppoſite monſoons, and that Diógenes loſt his paſſage by not arriving at Gardefan early enough to get into the Red Sea; conſequently he was hurried down to the ſouth, and could not get into port till he was ſomewhere about Patè or Melinda. The difference itſelf of twenty-five and twenty days is not ſo great as to inſiſt upon with ſeverity, and we muſt likewiſe add, that both voyages ſeem in conſequence of ſurprize, and not the ordinary courſe of the navigation. Mariners do not now, and certainly could not formerly,

vides Africa, this indeed is not impoſſible, as the Indus and the Ganges both cut the great belt of Aſia; but it is highly improbable, on account of the vaſt ſpace between. Neither does it make Ptolemy conſiſtent; for though d'Anville ſtill preſerves Ptolemy's ſources of the White River in his map, and Rennell does not diſcard them. The lakes of thoſe ſources are placed in 6° north by d'Anville, and in a very different longitude from Ptolemy's, while this lake of Ptolemy's is in 10° ſouth. And here d'Anville has a lake alſo, but of which he ſpeaks with great uncertainty. See Ptol. lib. i. c. 9. But Ptolemy, in the 17th chapter, expreſsly ſtates that this lake is not near the coaſt but far inland. D'Anville's earlieſt notice of this lake, called Maravi, is in a map which he compoſed for Le Grande's tranſlation of Lobo, in 1728.

[296] Ptolemy ſays, the Promontory of Rhapta was a little to the ſouth weſt.

[297] The facts are ſo curious that I have great pleaſure in ſtating them to the reader, and propoſing them to the conſideration of any Engliſh officer who may be accidentally brought on this coaſt. I muſt notice alſo that Diógenes and Theóphilus are both Greek names; a leading proof that even under the Romans, this trade was chiefly in the hands of Egyptian Greeks.

reckon by an individual, but a general run; and when they are in the ſweep of the trade winds or the monſoons, though the force of the wind is not perfectly or conſtantly equal, it is ſo generally ſubject to calculation, as to vary but a few days in very extenſive paſſages. This ſort of eſtimate all ſeamen have in ſuch voyages, and on ſuch coaſts as they frequent. And thoſe who know how nearly the computation of all ſeamen approaches to the truth, will certainly allow more preciſion in the accounts of Marínus and the Periplûs before us, than Ptolemy is willing to concede. On this point we have a moſt remarkable coincidence to notice; for as Marínus ſtates the paſſage of Diógenes from Arômata [298] to the lakes at five and twenty days, the Periplûs aſſigns exactly the ſame number from Opônè [299] to Rhaptum upon a diſtance as nearly equal as poſſible. The concluſion from this is incontrovertible; for it has already been ſhewn, that the courſes of the journal agree with the actual extent of the coaſt, and if the paſſage of Diógenes agrees with the day's courſes, it is impoſſible to admit the ſcepticiſm of Ptolemy.

But, from his rejection of the eſtimate, we may proceed to his contradiction of the facts; for in his ſeventeenth chapter he controverts the whole account of Marínus[300], and as far as we can collect, his account was in union with the Periplûs. The reaſons for admitting the ſtatement of the Periplûs are contained in the whole of the preceding pages. The reaſon for doubting Ptolemy is, that his account is not conſiſtent with his own detail of the coaſt,

[298] From Gardefan to Melinda or Patè.

[299] From d'Affui to Quiloa.

[300] I had once conceived an opinion that Marínus might be the true author of the Periplûs, from finding his great agreement with it, and that the objections which Ptolemy brings againſt Marínus in the ſeventeenth chapter apply very nearly to the Periplûs. But I am convinced

coaſt [301], nor conſonant to the knowledge of it, which we have at preſent. He ſets out with ſaying, that the merchants who trade between Arabia Felix and Ἀrômata, Azánia, and Rhapta, give a different ſtatement from that of Marínus. They mention that the courſe from Arômata to Rhapta is ſouth weſt; but from Rhapta to Praſum ſouth eaſt. This indeed would hold good for a ſmall bend of the coaſt, but upon the ſeven degrees which Ptolemy aſſigns to the interval is directly falſe; for the general inclination from Gardefan to the Cape of Good Hope is ſouth weſt upon the whole; and this turn which he aſſumes to the ſouth eaſt, ſeems only to prepare it for the curve he gives it all round the Antarctic Ocean. He then adds, that the village Panôn is next to Arômata, and that Opônè is ſix days from Panôn. If there be not a corruption of the text here, or a great error in our conſtruction of it, this is in direct oppoſition to his own table as well as the Periplûs. For his table gives only five minutes difference between the two. He next mentions Zengiſa, Mount Phalangis, and the bay called Apócopa, which it requires two courſes of twenty-four hours to paſs. Then the Little Coaſt of three ſimilar courſes, and the Great Coaſt of five; then two more to Eſſina, one to Serápion, and three more acroſs a bay to Rhapta. Niki, he adds, lies at the commencement of this bay next to Serápion. And laſt of all he notices a river called Rhaptum, with a city of the ſame name, the metropolis of Barbaria, with a vaſt bay which muſt be paſſed to reach Praſum, where the ſea is very ſhoal [302], and round Praſum is the country of the Anthropophagi. Now the

convinced this opinion cannot be defended, for Marínus was no navigator, but a geographer; and Marínus knew or had heard of Praſum, which the author of the Periplûs certainly had not.

[301] Page 111.

[302] So alſo ſays Marcian, Βραχῖια Θάλασσα, p. 8.

meaning of this language, if I underſtand it right, is, that at Rhaptum is the laſt ſettlement of the Arabs, and that Praſum is in the country of the Negroes, for ſo I interpret Anthropophagi. This is not expreſſed indeed, but is ſo perfectly conſiſtent with the Periplûs that it can hardly be diſputed.

The difference that there is between this detail of the coaſt and that of the Periplûs, will be beſt ſeen by conſulting the table (p. 136.); but whatever it may be, it contributes more to eſtabliſh that journal by its general concurrence, than it detracts from it by diſagreement in particulars. It appears to me, whether from predilection to my author, I cannot ſay, that Ptolemy had a journal before him but a worſe. I ſee the correſpondence between the two, but more conſiſtence in the Periplûs. I ſee likewiſe more circumſtances in this, more characters, and more intelligence, which perſuades me that it is written by one who performed the voyage, while Ptolemy relates after another. The reaſoning, therefore, which he builds on this, to correct Marínus, appears of leſs weight; for we find all the diſtances of the Periplûs correſpondent to the actual nature of the coaſt at preſent; and whatever failure there may be in the application of it to particulars, the leading characters, ſuch as the Straits of Bab-el-Mandeb, Ras-Feel, Gardefan, Daffui, Cape Baxas, the Coaſt of Seven Rivers, and the Zanguebar Iſlands are ſo clear and manifeſt, that the outline may be conſidered as perfect, whatever error there may be in the filling up. To my own mind the evidence is complete; but every author who compiles from the labours of others, without viſiting the countries of which he treats, muſt ſubject the ſpeculations of the cloſet to the determination of navigators on the ſpot. To this law I ſubmit my inquiries moſt chearfully, ſoliciting

information

information without fear of the reſult, and ready to ſtand corrected by every intelligent officer who will make this work the companion of his voyage. One farther obſervation is all that remains in this part of my diſcuſſion, which is, the peculiarity that Praſum, ſignifying Green, ſhould point out a green cape for the termination of ancient knowledge on the eaſtern ſide of the vaſt continent of Africa, while another Green Cape (Cape Verde) ſhould have been for many years the boundary of modern navigation on the weſtern ſide. If I am not miſtaken, Cape Verde has its name from its verdant appearance when firſt ſeen by the Portugueſe; otherwiſe it might have been thought that thoſe who firſt reached it had annihilated the great triangle like Juba and Pliny, and thought they had arrived at the Green Cape [303] of the ancients. This will not appear an idle obſervation to thoſe who are converſant with the ancient geographers, and who know that they found, as already noticed, a weſtern Horn and Cernè on both ſides the continent, and a Thulè from the Orkneys to the Pole. But there is another view in mentioning it, which is, that ſome future navigator, with this clue to direct him, may, when he is going up the Moſambique paſſage, ſtill find ſome characteriſtick greenneſs, either in the colour of the ſea, or on the continent, which may enable him to point out the Praſum of the ancients. This is a point I cannot aſcertain to my own ſatisfaction, but it cannot be farther ſouth than Corrientes, nor farther north than Quiloa or the Zanguebar Iſlands. Engliſh ſhips generally leave the coaſt before they are ſo far north, but accident may carry ſome

[303] Πράσον ſignifies a Leek, but it is alſo uſed for a ſea weed of the ſame colour, and may poſſibly allude to ſuch weeds found in this ſea.

curious

curious obſerver to the ſpot, which he may recognize, by knowing previouſly where he is to ſearch, and what he is to ſearch for.

DISCOVERIES of the PORTUGUESE.

XXVI. WITH veſſels of the moſt perfect conſtruction to encounter all the dangers of the ſea, with inſtruments of all kinds to aſcertain the place of the veſſel, with officers equal to every ſervice, not only from their intrepidity but their ſkill, a voyage performed in three years from Europe to the Red Sea, round ſuch a continent as Africa, for the firſt time, would have added no ſmall degree of luſtre even to the reputation of a Cook: and yet ſuch a voyage is imputed to the Phenicians in an age when they had neither charts or inſtruments, when they had no veſſels fit for a navigation beyond the Red Sea, or the limit of the monſoons. But to judge of the difficulty of ſuch an undertaking for the firſt time, we cannot form our eſtimate upon better grounds, than by a brief recapitulation of the obſtacles ſurmounted by the Portugueſe, and by obſerving that the attainment of the ſame object coſt them almoſt a century, which the Phenicians are ſaid to have reached in the ſhort ſpace of three years.

Of the progreſs of this diſcovery it will be neceſſary to trace little more than the dates [304]. Prince Henry, fifth ſon of John the firſt, king of Portugal, took up his reſidence at Sagrez, near Cape Saint Vincent, about the year 1406. The hiſtory of his diſcoveries is familiar to every one, but, like the hiſtory of all others who are the

[304] See Faria and Oſorius in init. Barboſa and Alvarez, in Ramuſio, Bruce, Mickle's Luſiad, and Caſtaneda.

favourites

favourites of mankind, it is not sufficient to give him his due merit, which is superlative, but it must be enhanced by hyperbole. It is not true that in his day there was no geography but in the poets[305], that he is the inventor of the astrolabe[306] and the compass, or the first that put these instruments into the hands of mariners: but he was bred a mathematician, and he procured the best charts and best instruments the age afforded. He improved upon or corrected every one of them, and he taught[307] the application of them in the best manner to the commanders employed in his service.

This great man, with one object always in his mind, distracted by no other cares of the world, never married, never incontinent, was determined, by his regard to religion, to subvert the power of the Mahometans, and by the love of his country to acquire for her that trade which had enriched Venice and the maritime states of Italy. These were his views, and this was his merit. It was not accident but system that carried the fleets of Portugal to the East Indies, and Columbus to the West. When Henry first commenced his operations, Cape Nun, in latitude 28° 40′ 0″, was the limit of European knowledge on the coast of Africa. This Cape is just beyond the boundary of Morocco, and the Portuguese knowledge of it was derived from their wars with the Moors of Barbary. Com-

[305] Bruce and Mickle.

[306] See on the Astrolabe, note infra.

[307] I cannot help mentioning a circumstance which contributes much to our national honour. Pietro della Vallè who sailed both in English and Portuguese ships in the East Indies about 1620, observes that the Portuguese masters and pilots made a mystery of their knowledge, whereas on board the English ships all the youths on board were summoned to take the observation at noon; their books and calculations were then likewise corrected. Purchase mentions this in some instructions given by the merchants to the commanders they employed; and here, perhaps, we may trace a cause why the science has always been encreasing among the English, and declining among the Portuguese.

mencing

mencing the line of his diſcovery from hence, in 1418 two of his officers reached Cape Boyador, in latitude 26° 30′ 0″. The ſame effort reſtored to geography the Canaria of Pliny, or gave that name to the iſlands which retain it ſtill, and lie between Nun and Boyador. Boyador, however, was not doubled till 1434. It was, ſays Faria, a labour of Hercules; and it was not till 1442 that the diſcovery was advanced to Rio-del-Ouro, under the tropick of Cancer. This name points to the acquiſition of gold; and hiſtory mentions that the duſt of that precious metal was here firſt offered as a ranſom for ſome of the natives who had been taken priſoners. Upon the return of theſe veſſels to Portugal[308] the ſight of gold produced an emotion much more effectual than all the exhortations of Prince Henry had been able to excite; a company[309] was immediately formed at Lagos, and the progreſs of diſcovery was enſured whether Henry had lived or died. This is the primary date to which we may refer that turn for adventure which ſprung up in Europe, which pervaded all the ardent ſpirits in every country for the two ſucceeding centuries; and which never ceaſed till it had united the four quarters of the globe in commercial intercourſe. Henry had ſtood alone for almoſt forty years, and had he fallen before theſe few ounces of gold reached his country, the ſpirit of diſcovery might have periſhed with him, and his deſigns might have been condemned as the dreams of a viſionary; but he lived till 1463, and in the years 1448 and 1449 had the ſatisfaction to ſee his diſcoveries extended

[308] Bruce obſerves, this muſt have come from the country farther ſouth, vol. ii. p.

[309] It will appear hereafter that a John Diaz was one of the firſt partners of this Company, and from him ſeveral of the family were employed in the future diſcoveries, till the time of Bartholomew Diaz, the firſt circumnavigator of Africa, in 1487. Thus was the connexion formed between the diſcovery of Rio-del-Ouro and the Cape of Good Hope.

to

to Cape Verde, (in latitude 14° 45′ 0″,) to the Cape Verde iſlands and the Açores. This cape was likewiſe doubled, and ſome progreſs is ſuppoſed to have been made as far ſouth as to the equator, but Cape Verde may be conſidered as the limit of Henry's diſcoveries. He is deſervedly [310] celebrated by all writers as the reviver of navigation, and the great founder of that commerce which has raiſed the maritime power of Europe above all the other nations in the world.

After the death of Henry his deſigns languiſhed during the reign of Alonzo, but the ſpirit of adventure was not ſuppreſſed. In 1471 the diſcoveries extended to Cape Gonzales beyond the equator, and terminated with this reign at Cape Saint Catherine, in latitude 2° 30′ 0″ ſouth [311]. John the ſecond ſucceeded to the throne in 1481; and revived the purſuits of Henry with all the ardour of their author. In 1484 his fleets reached Congo and penetrated to 22° ſouth. It was in Benin that the firſt account of Abyſſinia was received, and nearly about the ſame time John ſent out Bartholomew Diaz with three ſhips, who firſt circumnavigated the extreme point of Africa, and diſpatched Covilham in ſearch of India by Egypt and the Red Sea. The date of Diaz's expedition is fixed in 1486, nearly eighty years after the commencement of Henry's plan, and the expedition of Covilham is aſſigned to 1487 [312]. I have recapitulated theſe facts and dates not for the purpoſe of repeating a hiſtory known to every one, but that the reader may compare the difficulty of proſecuting this diſ-

[310] Mickle xxxix. from Faria, vol. i. p. 21. See his character, p. 18.

[311] Faria, vol. i. p. 20, 21.

[312] Theſe dates are of conſequence; becauſe Bruce, vol. ii. p. 108. ſuppoſes Diaz to have ſailed in conſequence of Covilham's intelligence, which is directly contrary to the teſtimony of Faria, Caſtaneda, Alvarez, and Mickle. When Covilham wrote he certainly did not know of Diaz's ſucceſs.

covery by the Portugueſe, with the facility attributed to the attempt of the Phenicians, in their three years' navigation.

But Covilham[313] is a name of ſuch importance, his hiſtory ſo extraordinary, and his account ſo connected with the Periplûs, that to paſs him in ſilence would be an unpardonable omiſſion. John II. in the beginning of his reign had ſent two friars, one of the order of St. Francis, and the other John of Liſbon, with a third who was a layman, into the Eaſt[314], in order to diſcover India by land. Theſe travellers went, for want of the Arabick language, no farther than Jeruſalem. In the year 1486 or 1487[315], he therefore ſent John Pedreio de Covilham and Alonſo de Payva on the ſame ſervice; and after them two Jews, Abraham of Beja and Joſeph of Lamego. As nothing can ſhew the ſolicitude of the king more than theſe circumſtances, ſo nothing can prove his penetration more than this choice of Covilham; he was a ſoldier, he had ſerved in Africa, had been an ambaſſador to Morocco, and had acquired the Arabick language to perfection. In obedience to his ſovereign he departed from Liſbon[316], and took the route of Barcelona and Naples, and thence by Rhodes and Alexandria to Cairo. He there joined a party of Mograbin[317] Mahometans, and went in their company to Tor, Suakem, and Aden. At Aden he embarked for Cananor on the coaſt of Malabar, and viſited Ormuz, Goa, and Calicut. He *ſaw*

[313] Called de Covilham from the name of his birth place. Oſorius always writes John Petreio. See vol. i. p. 147.

[314] Caſtaneda, p. 2.

[315] I collect that Covilham entered Abyſſinia in 1488 from Alvarez in Ramuſio; for Alvarez ſays he confeſſed him in 1521, thirty-three years after he had entered the country.

[316] Alvarez in Ramuſio, vol. i. p. 191. 237. et ſeq.

[317] Moors of Barbary, Weſtern Arabs.

the pepper and ginger [318], *he heard* of cloves and cinnamon. After this he returned to the coaſt of Africa, touched at Zeila, and went down the coaſt as low as Sofala, the laſt reſidence of the Arabs, and the limit of their knowledge in that age, as it had been in the age of the Periplûs. The Arabs of Covilham's age knew indeed that the ſea was *navigable to the ſouth weſt*, as their earlier countrymen did when the author of the Periplûs was in the country, but they *knew not where it ended.* With this intelligence, and what he could collect of the Iſland of the Moon, or Madagaſcar, he returned by Zeila, Aden, and Tor to Cairo. At Cairo he met the two Jews, Abraham of Beja and Joſeph of Lamego, by whom he ſent an account of the intelligence he had collected to the king, and in the letter which contained it, he added,

" That the ſhips which ſailed down the coaſt of Guinea might " be ſure of reaching the termination of the continent, by perſiſting " in a courſe to the ſouth ; and that when they ſhould arrive in the " Eaſtern Ocean, their beſt direction muſt be to inquire for Sofala " and the Iſland of the Moon."

It is this letter above all other information which with equal juſtice and with equal honour aſſigns the theoretical diſcovery to Covilham as the practical to Diaz and Gama; for Diaz returned without hearing any thing of India [319], though he had paſſed the cape; and Gama did not ſail till after the intelligence of Covilham had ratified the diſcovery of Diaz.

[318] What a teſtimony do theſe two words give of his veracity, and what a variety of connected circumſtances do they ſuggeſt to thoſe who know the country, the trade, and the deſigns of John ? Alvarez ſeems to write what Covilham dictated. Alvarez, p. 237.

[319] Caſtaneda, p. 2.

Covilham was not to receive the reward of his ſervices; one part of his commiſſion he had not executed, which was, to viſit Abyſſinia; he returned, therefore, from Cairo to Ormuz, and from Ormuz once more to Aden, where he waited till he found the means of introduction into Abyſſinia. Here he was received with kindneſs, but hence he was never to return; for in Abyſſinia he was found by Alvarez[320] the almoner to the embaſſy of John de Lima, in 1525, who obſerves that the king had given him a wife and lands, and that he was beloved by the people as much as by the ſovereign; but that his return was for ever precluded. He ſolicited John de Lima, and John interceded with the king in vain. I dwell with a melancholy pleaſure on the hiſtory of this man, (whom Alvarez deſcribes ſtill as a brave ſoldier and a devout Chriſtian,) when I reflect upon what muſt have been his ſentiments on hearing the ſucceſs of his countrymen in conſequence of the diſcovery to which he ſo eſſentially contributed. *They* were ſovereigns of the ocean from the Cape of Good Hope to the Straits of Malacca: *he* was ſtill a priſoner in a country of Barbarians.

There is a circumſtance attached to the hiſtory of Covilham of great geographical importance, which is the map or chart committed to his charge by Emanuel, at that time prince[321] and afterwards king of Portugal, which was copied and compoſed by the licentiate Calzadilia, afterwards biſhop of Viſeo, a doctor Rodrigo, and a Jew named Moſes, with great ſecrecy in the houſe of Peter

[320] See the work of Alvarez in Ramuſio, vol. i.

[321] Duca. See Caſtaneda, p. 1, 2, 3. Alvarez in Ramuſio, vol. i. p. 236.

of

of Alcazova. This map [322] was put into Covilham's hands with orders to make his way, if poſſible, into Abyſſinia, and diſcover whether there was a paſſage round the extremity of Africa, which the framers [323] of the map aſſerted to be practicable, on the authority of ſome obſcure information which they had collected.

Bruce aſſerts [324] that Covilham ſent home from Cairo a map which he had received from a Moor in India, in which the Cape, and all the cities round the coaſt were exactly repreſented. But whence Bruce draws this account I cannot diſcover; and if there was ſuch a map among the Moors it muſt be a fiction, for none of them had ever paſſed Corrientes by ſea; and cities there are none [325] for

[322] I imagine it is the compoſition of this map which has induced Mickle to ſay, that the Aſtrolabe was invented by two Jews, Rodrigo and Joſeph at Liſbon; and I have little doubt that the uſage of the word Aſtrolabe deceived him, or the author from whom he copied. The primary meaning of Aſtrolabe was an armillary ſphere. Ptolemy reduced this to a planiſphere; and yet the name of Aſtrolabe continued till it became applied to maps like his in ſtereographick projection. The Sea Aſtrolabe is a different inſtrument, for taking the altitude of the ſun, ſtars, &c. It is a ring with a moveable index. See Chambers's Dictionary, *in voce*. This laſt ſort of Aſtrolabe is deſcribed in Chaucer's treatiſe on that ſubject, which bears date 1391; ſo that if Mickle means this inſtrument, it could be no invention of the Jewiſh doctor's. See Chaucer, Urry's edition, p 440. and that he does mean it, I refer to his own words, Luſiad, p. 193. Note P. where he quotes di Barros, Dec. i. lib. iv. c. 2. I cannot refer to di Barros; but in Alvarez (Ramuſio, vol. i. p. 236.) I find the circumſtance of this map by Caſtadilia, with the name of Rodrigo and Moſes the Jew, whom I ſuppoſe to be the Joſeph of Mickle. Purchas, vol. ii. b. ii. p. 8. ſpeaks with much more propriety; he ſays the Aſtrolabe was applied formerly only to aſtronomical purpoſes, but was accommodated to the uſe of mariners by Martin Bohemus, a ſcholar of Regiomontanus, at the ſuggeſtion of John king of Portugal.

[323] Et dipaſſare un di loro nell' Ethiopia a vedere il paeſe del Prete Janni et ſe ne i ſuoi mari fuſſe notitia alcuna che ſi poſſe paſſare ne mari, de ponente, perche li detti Dottori dicevano haverne *trovata non ſo che memoria*.

[324] Vol. ii. p. 108. Caſtaneda, p. 3. ſays that Covilham ſet down the names of places in the chart he carried with him, *albeit ill written*.

[325] "Howbeit there appeared unto them no "townes within this land, by reaſon that along "thoſe coaſts there are none ſcituated." Caſtaneda, p. 8. "but further within there be "townes and villages."

almoſt

almoſt twenty degrees from Corrientes to the Cape, or from the Cape for twenty degrees to the northward on the weſtern coaſt.

That fictitious maps of this ſort might exiſt both in the Indies and Europe, among Mahometans[326] and Chriſtians, is highly probable, for it was a prevailing notion in all ages, that Africa was circumnavigable. And it has been repeatedly noticed in this work, that on both coaſts, when the voyagers reached the limit of diſcovery, the report of the place was always in favour of a paſſage. We may allow even more than this, and ſay, that the natives had gone[327] by land much farther to the ſouth than the navigators by ſea; and that their accounts were almoſt unanimous in maintaining the ſame aſſertion. The ſtrongeſt evidence I have found of this is that which the Portugueſe afterwards report of Benomotapa; a great nation when *they* arrived in Africa, and the remnant of a much greater, which had poſſeſſed cities of great extent and regular buildings; and from which it was ſaid there were public roads running far to the weſt and quite down to the Cape[328]. We are not to believe theſe reports, perhaps, in their full extent; but the ruins of great buildings ſeem authenticated; and the exiſtence of gold and gold mines is univerſally aſſerted. Here is Bruce's Ophir[329],

[326] The communication between the Oriental and Atlantick Ocean ſeems to be intimated in Abulfeda, (p. 50. Gagnier's tranſlation, MS. in the Bodleian,) but it is ſo obſcure that I am not certain that I comprehend it even in the tranſlation.

[327] This ſeems to appear from Al Edriſſi, p. 28. et ſeq. where he mentions Sofala, and ſeveral other places beyond it with great obſcurity.

[328] See Ed. Barboſa in Ramuſio, vol. i. p. 288. et ſeq. Barboſa mentions ſuch a road: that it went far ſouth may be very true; but hardly to the cape.

[329] Pere Dos Santos in Lobo's hiſtory of Abyſſinia, finds a Fura or Afura inland from Sofala, and concludes it to be Ophir, p. 261. Fr. ed. He finds alſo all that Solomon brought into Judea except peacocks; but his commentator obſerves that Thukkiim, the Hebrew term, may be tranſlated peroquets as well as peacocks. I leave the voyage to Ophir for the diſcuſſion of others, obſerving only that the circumſtances attending it are in favour of Africa, though Goſſelin confines it to Sabêa.

the

the tradition of the queen of Sheba [330], the coaſt of Sofala, and the great river of Cuama.

Such a nation as this, while in a flouriſhing ſtate, we can ſuppoſe to have extended its communications far to the weſt and to the ſouth, with roads both ways as far as their caravans could find purchaſers to invite them. With this nation the Mahometans of Sofala and Moſambique muſt of neceſſity be connected; and if they had a map or chart of the cape, from the information of this nation it muſt have been collected. It is the mention of cities in this map which alone makes us ſuſpect that it was the product of their own imagination. Maps of this ſort are ſuppoſed to have been framed as readily in Europe as in Aſia. And one of theſe Mickle ſpeaks of in the introduction to his tranſlation of the Luſiad in the following terms:

" Antony Galvan relates [331], that Franciſco de Souſa Tavanes told " him, that Don Ferdinand told him, that in 1526 he found in the " monaſtery of Acobaça a chart of Africa an hundred and twenty " years old, which was ſaid to be copied from one at Venice, which " alſo was believed to have been copied from one of Marco Polo, " which, according to Ramuſio, marked the Cape of Good " Hope."

Mickle conſiders this as a mere report calculated to deprive prince Henry and the kings of Portugal of the honour of the diſcovery; and its date of 1526, almoſt thirty years after the diſcovery had

[330] This tradition might well extend to this country before the arrival of the Mahometans on the coaſt, from the early Arabs, and much more ſtrongly from the Abyſſinians, who in their better days do certainly appear to have had conqueſts in Arabia, and connections with Egypt, and in the interior of Africa to the weſt and ſouth.

[331] Introd. p. xxxiv.

actually

actually taken place, affords full ground for the ſuſpicion. But let us ſuppoſe that the depicted travels of Marco Polo, which adorned one of the churches at Venice [332], actually contained the Cape of Good Hope, or rather the extreme point of Africa, it proves nothing. It ſhews only that the prevailing notion of the circumnavigation prevailed at Venice, as it had done many centuries before in Greece and Rome, and that it was inſerted into this chart from the imagination of the draftſman.

Marco Polo [333] himſelf was too wiſe and too faithful a traveller to aſſert this. We have his work; and we find his language perfectly in harmony with that of Scylax and the Periplûs. "Beyond the "iſlands of Magaſtar and Zanzibar," ſays he, "there is no farther "navigation ſouthward [334], becauſe the ſea runs there with great "velocity to the ſouth, ſo that it would be impoſſible for any "veſſel to return." It muſt be here noticed, that as he writes Magaſtar and Madaſtar for Madagaſcar, ſo under the name of Zanzibar he comprehends the main coaſt of Africa, which ſtill takes the ſame name, and carries it to the extent of two thouſand miles. Whatever error there may be in this, his mention of the current

[332] In the church of Saint Michael de Murano near Venice. Ram. vol. ii. Dichiaratione, p. 17.

[333] There was a Portugueſe verſion of Marco Polo publiſhed in Portugal in 1502, by a gentleman of the court, attendant on Eleonora, queen of Emanuel, who likewiſe publiſhed the account of Nicolas des Contes or Conti, and of Hierome de Saint Etienne. This publication, in 1502, makes it highly probable that Marco Polo's work was known in Portugal previous to the voyage of Diaz, and was now publiſhed when it could not interfere with the glory of the diſcovery, and might give information of the countries in the eaſt.

[334] It is to be obſerved that the reading of this paſſage is very different in Ramuſio from that of Bergeron. But both agree in ſtating the impetuoſity of the current to the ſouth. I have followed Ramuſio, as I always do, in preference to other tranſlators. See Ramuſio, vol. ii. M. Polo, lib. iii. c. 35. Bergeron, cap. 39. See the account of this map, Ramuſio, vol. ii. Dichiaratione, p. 17.

between

between Madagaſcar and the continent is an illuſtrious truth, the more remarkable as M. Polo was never on this coaſt himſelf, but muſt have derived his knowledge of the fact from the Malays or Arabs, who were the only navigators of the Indian Ocean in his age. And the reaſon aſſigned for their not paſſing to the ſouth, though they knew there were [lands or] iſlands in that quarter, is the very ſame which the Arabs of Sofala and Moſambique gave to the Portugueſe at their arrival on the coaſt. The whole of this is conſiſtent with the knowledge of the Greeks and Arabs, which terminated at Praſum; and in all ages the current of the Moſambique Channel appears to have been an inſuperable barrier to all but the Phenicians of Herodotus.

Such is the account of Marco Polo himſelf, and let us next conſider the celebrated map of his travels which was preſerved at Venice, and which was probably one of the moſt efficient cauſes which led to the diſcoveries of the Portugueſe. Ramuſio has preſerved the hiſtory of this, and as his book is not in every body's hands, the reader will perhaps be gratified by the inſertion of his account.

In the church of St. Michael di Murano near Venice, there was a caſe [335] or cabinet near the choir, which contained this map that attracted the particular notice of all travellers who came to Venice. The map was compoſed by a lay-brother [336] of the convent, from another map or chart which had been brought home by Marco Polo and his father, on their return from Tartary [337]. The original had been diſfigured, and brought into diſrepute by the inſertion of a variety of things too modern for the age, and ridiculous in their

[335] Armara, Armoire.

[336] Converſo.

[337] Cataio.

appearance[338]; ſtill it was evident when the work of M. Polo came to be read again and conſidered, that this map and chart was compoſed by him or under his direction. The artiſt therefore who undertook to copy and reform it, leaving out the abſurdities, and adding the longitude and latitude, which the original had wanted, framed the map which is now preſerved in the church of St. Michael, and which is viſited as the compoſition of Marco Polo himſelf. In this map a variety of curious particulars are obſerved, unknown before, or at leaſt to the ancients; and more eſpecially that towards the Antarctick circle, where Ptolemy had placed his unknown ſouthern[339] continent without ſea; there appeared in this map, made ſo many years ago, the ſea ſurrounding the extremity of Africa, ſo that a paſſage from the Indian Ocean into the Atlantic ſeems to have been known in the time of Marco Polo, though there was no name given to that promontory which the Portugueſe afterwards called the Cape of Good Hope.

Three queſtions ariſe out of this account, 1ſt, Whether the delineation of the Cape in the copy is a proof that it exiſted in the original. 2dly, Whether this copy is the original from which the biſhop of Viſeo's map or chart was taken, which was delivered to Covilham; and 3dly, Whether the biſhop of Viſeo's map is that which is mentioned by Bruce.

Firſt. It certainly does ſeem probable that the report concerning the termination of Africa in a cape was as current in Aſia and the Indies as in Europe. That either the Chineſe or the Malays did

[338] As the old maps contain monſters both on land and ſea, ſo it is highly probable the Ruck of M. Polo, lib. iii. c. 35. and Griffins, &c. might have been the additions here complained of.

[339] Terra Auſtralis incognita.

navigate the ocean as far as Madagaſcar, and the coaſt of Zanguebar is evident; for Marco Polo was not there himſelf, and could have his account only from them or from Arabs[340], whom he might meet with on the coaſt of Malabar from Arabia or Africa. It ſhould ſeem however rather from the former than the latter, for as Marco Polo is the firſt author who introduced the name of Madagaſcar[341] into Europe, ſo is it probable that this title is not given to it by the natives, but by the Chineſe, Malays, or Hindoos. In confirmation of this we find in Cook's comparative vocabulary, drawn up by Mr. Marſden, that the Malay numerals, and ſome other radical words, are ſtill current in that iſland. Now if the Malays traded to this iſland, or the coaſt of Zanguebar, they muſt have had intercourſe with the Arabs ſettled there; and that the Arabs did believe the poſſibility of a circumnavigation has been proved already, both from their obſervation of the interior, and from ſuch intelligence as they might derive from Benomotapa. From ſome of theſe ſources there can be little doubt that Marco Polo, if his map or chart contained the continent of Africa, might aſſign a termination to the coaſt, and convert that into ſea which Ptolemy and his copiers had aſſigned to their ſouthern continent.

But there is a ſtronger argument for believing that this African Cape was in the original of M. Polo, and not introduced by the artiſt who copied it, which is, that M. Polo himſelf ſpeaks of the coaſt of Zanzibar, not as the continent, but as an iſland two thou-

[340] The Arabs had been in India 600 years before the Portugueſe arrived at Calicut, according to the Portugueſe accounts, and we know from Pliny, that they were ſo ſettled or ſpread on the coaſt of Malabar and Ceylon, that their ſuperſtitions had been adopted by the natives previous to his age.

[341] He writes Madaſtar or Magaſtar.

ſand miles in circumference [342]; whatever error there may be in this, it is ſelf-evident, that if he made it an iſland, he muſt give it a termination on the ſouth, as well as on the other three quarters; and if he delineated this, that ſouthern boundary muſt be the very limit of Africa, which Ramuſio ſays the copy contained. It is for this reaſon moſt eſpecially, that we ought to admit the fact; and if the fact is admitted, to M. Polo muſt be aſſigned the honour of firſt giving this intelligence to Europe, and of opening the way for the diſcoveries of the Portugueſe.

Secondly. What the map was which was compoſed for the uſe of Covilham by Calzadilia, afterwards biſhop of Viſeo, by Dr. Rodrigo and the Jew Moſes, cannot be determined without better materials from Portugal than are in my poſſeſſion; but there is great reaſon to believe, that the principal ſource of that work was the map of Marco Polo, becauſe the firſt printed edition of his work was in Portugueſe, dated Liſbon 1502, by a gentleman in the court of Eleonora, wife of Emanuel; and this being only four years after the voyage of Gama, when every ſpirit was rouſed by the diſcovery, it ſeems highly probable that the intelligence contained in this book was in poſſeſſion of the court of Portugal previous to the expedition, and had been made uſe of by the kings of that country, for the purpoſe of inſtructing and encouraging thoſe who were employed upon that ſervice.

It is to be obſerved, that the original work of Marco Polo was compoſed in Italian by a Genoeſe, who took his inſtructions from the mouth of the author, when a priſoner at Genoa, about the

[342] A torno.

year

year 1300. From this Italian copy [343] a Latin tranſlation was made at Bologna, and publiſhed in MS. two copies of which were preſerved, one in the Library of the Canons of Latran at Padua; the other at Colonia [344] in Brandenburg, in the Library of the Elector. Both copies are ſuppoſed to be nearly the ſame, but differ from another which was made at Bâſle. Theſe are all manuſcripts, but from one of theſe it may well be imagined that a copy had been procured by the Portugueſe, during almoſt the whole century that their mind was ſet upon this object, from the firſt attempt of prince Henry in 1406, to the voyage of Gama in 1497. The edition of this work from the preſs, ſo early as 1502, in Portugal ſeems to confirm this, and as the circumnavigation was completed, it could now no longer be concealed, nor could any future adventurer detract from the honour of the diſcovery. Theſe circumſtances, it is true, amount to no proof, but afford ample ground for believing that the map delivered to Covilham was framed from this ſource of information. Whether the original map and chart of M. Polo, in the church of St. Michael di Murano at Venice, or the copy which replaced it had been copied by the Portugueſe, I have no means to determine; but as it ſeems to have been open for the inſpection of all viſitors, and as the ardour of the Portugueſe was pointed to rival the commerce of Venice, from their firſt outſet to the attainment of their object; it may reaſonably be concluded, that if they had no Portugueſe [345] in that

[343] The whole of this is from the preface of Andre Muller Grieffenhag in Bergeron.

[344] What Colonia? I wiſh the German Latiniſts would give us the modern names of cities.

[345] Bruce, vol. ii. p. 96. ſays Don Pedro Henry's brother brought a map from Venice, in which the cape was marked; but he gives no authority. If I had known where to find this fact, I could have determined the queſtion. I do not doubt it, but I with both Bruce and many other authors would prefer the

that city to collect intelligence, they employed Jews for that purpose; for Jews they seem ever to have persecuted and trusted at the same time; a Jew was employed in forming Covilham's map, and two Jews were sent after him into Egypt.

Thirdly. What map it was that Covilham sent home, which he had procured from a Moor in India, cannot be determined; neither has Bruce, who mentions this circumstance, condescended to give us his authority. I suspend, therefore, all judgment upon this till I know the foundation on which it stands; it seems rational that the Mahomedans should have charts of their navigation[346], as well as the Europeans; but as no Mahomedan or Arab had passed the cape, the delineation of it must have stood upon the same sort of intelligence as Marco Polo had acquired in the east, or be inserted from imagination and the prevailing belief of the fact. Whenever I can discover the authority of Bruce it will deserve consideration, till then I shall think that if Covilham filled up the map he had received, or corrected it, or added to it such information as he could collect, it is a more probable account than the report of this Moorish map, which contained cities that never existed. Such a corrected map of Covilham's we read of in Castaneda, who seems to have seen it, as he says it was ill-written and disfigured; this I take to be the map to which Bruce alludes.

the information of their readers by marginal references to the vanity of a clean page. It does seem highly credible that the map of M. Polo was brought to Portugal by this Don Pedro.

346 What sort of charts or maps the Arabs had, as late as 1400, may be seen by the map of the world I have inserted in the appendix from Al Edrissi. The Great Cape of Africa is not in that, though posterior to M. Polo; but the author is prior to the Venetian, though the copy of his work is later.

Voyages of BARTHOLOMEW DIAZ and VASCO DE GAMA.

XXVII. FROM the year 1410[347] to 1486 the Portugueſe had been engaged in advancing their diſcoveries to the ſouth; ſome progreſs had been made in every reign; but the honour of doubling the extreme cape of Africa was reſerved for John the ſecond. In[348] 1486 Bartholomew Diaz ſailed from Portugal with three ſhips; he is called an officer of the king's ſtorehouſe at Liſbon, but is manifeſtly of a family[349] which had long been employed in theſe voyages of diſcovery; and had probably been gratified with a place of truſt for merits in the ſervice. He advanced to 24° ſouth, one hundred and twenty leagues beyond the track of former navigators, and then ſtretching boldly out to ſea, never touched upon the coaſt again till he was actually forty leagues to the eaſtward of the cape, which he had paſſed without ſeeing it in his paſſage.

This however was not the termination of his diſcovery, for he proceeded to the river del Infante, upwards of ſix degrees to the eaſtward of Agulhas[350], which is the moſt ſouthern point of Africa, and near a degree beyond the Cape of Good Hope. The reaſon of his return is not quite evident; but he had parted[351] with one of his

[347] One thouſand four hundred and ſix is given as the firſt date of prince Henry's deſigns.

[348] See Caſtaneda, Faria, Mickle, Oſorius, Bruce.

[349] We meet with Dinis Diaz and Vincent Diaz in 1447, and John Diaz who was one of the firſt company erected at Lagos in 1444. Faria, p. 9.

[350] Cape Agulhas or Needle point. Theſe names ſtill decorate our charts, and it is but juſtice to preſerve the names and language of every diſcoverer. The French have had the vanity to diſplace ſeveral appellations of our late diſcoverers. But La Peyrouſe was honeſter than his countrymen.

[351] He met this veſſel on his return with only three of the crew alive. One died for joy.

little

little fleet on his paſſage, and it may be preſumed that the impoſſibility of collecting information from the natives, with the continuance of the coaſt to the eaſtward, which he might have expected to trend to the north, contributed to his determination. Five and twenty leagues ſhort of this river he erected his croſs on a rocky iſlot, which ſtill bears the name of De la Cruz, in the bay of Algoa[352]. This is a perpetual monument to his honour, and the Grand Cape which he ſaw on his return he ſtyled the Cabo Tormentoſo, from the tremendous ſtorms he had encountered on his paſſage. The different ſentiments with which this diſcovery inſpired his ſovereign upon his return, reverſed the omen, and changed the Stormy Cape into the Cape of Good Hope, a name which has ſuperſeded the pretenſions of all occupants and all conquerors, and which it is hoped will preſerve the glory of a generous monarch, and his hardy ſubjects, to the end of time.

Still, though the diſcovery was made, it was not completed. India had been the object of the ſovereign, and the nation, for almoſt a century; but India was neither found, or ſeen, or heard of, this was wanting to the fame of Diaz, and this was the cauſe that all the glory of the diſcovery attached to Gama. Gama was a man of family[353], and Diaz ſailed under him, with an inferior command; he had not even the ſatisfaction of attending his ſuperior to the completion of his own diſcovery, but returned from St. Jago, and was again employed in a ſecondary command under Cabral, in the

[352] Algoa, in the Engliſh charts, properly Del Agoa, (Agua, water,) there are two Del Agoas.

[353] Faria. But Caſtaneda takes no notice of his family; he at leaſt had armorial bearings, which, in that age, implied the rank of gentleman. He bore a Gama, i. e. Dama.

fleet

fleet that ſailed to India in 1500. In this expedition Braſil was diſcovered, and in the paſſage from thence to the Cape, four ſhips periſhed, one of which was that of Bartholomew Diaz with all on board [354].

It would ſeem natural that the diſcovery of Diaz ſhould have been immediately proſecuted to its completion; but it required a deliberation of ten years and another reign before a new expedition was undertaken; and great debates are mentioned as paſſing in the council of Portugal, whether the attempt itſelf were expedient, or any advantage could be derived from it to the nation at large.

In the mean time, however, the deſign had never been relinquiſhed, or the prior diſcoveries neglected; John II. had diſpatched Covilham and his companions into the eaſt, and the eſtabliſhments on the coaſt of Guinea had been attended to with anxious ſolicitude. At length when Emanuel had determined upon proſecuting the diſcovery of India, Gama was ſelected for the ſervice, and was conducted to aſſume his command on board the fleet, under the moſt ſolemn auſpices of religion [355]. The king, attended by all his court, accompanied the proceſſion, and the great body of the people was attracted to the ſhore, who conſidered him and his followers rather as devoted to deſtruction, than as ſent to the acquiſition of renown.

[354] Mickle Luſiad, p. 201. Caſtaneda, P. 73.

[355] Bruce, who is no enemy to religion, no Volney, has condemned the religious ſolemnity attending this embarkation, as diſcouraging; but he ſeems neither to have conſidered the age or the nation. By all that we can collect of the execution of this voyage, Gama ſeems to have devoted himſelf to death, if he ſhould not ſucceed, from a ſenſe of religion and loyalty. His ſucceſs is owing to this ſentiment.

The fleet conſiſted of three ſmall ſhips and a victualler, manned with no more than one hundred and ſixty ſouls; the principal officers were,

Vaſco de Gama.
Paul de Gama, his brother.
Bartholomew Diaz, who was to accompany them only to a certain latitude.
Diego Diaz, purſer, brother of Bartholomew.
Nicolas Coello.
Pedro Alanquer, who had been pilot to Diaz.
Gonzalo Gomez.

They ſailed from Liſbon on the 18th of July 1497, and after parting with Diaz at St. Jago, reached the Bay of St. Helena in latitude 32° 35′ 0″, on the 4th of November. They had on board ſeveral who ſpoke the Arabick language, and others who had acquired the Negro tongue by former voyages to the Gold Coaſt, Benin, and Congo. In the Bay of St. Helena they found the natives which we now call Hottentots, as we diſcover by the mention of a peculiarity in their utterance, which the journal calls ſighing[156], and which Vaillant deſcribes by the term *clappement*, a guttural cluck, the characteriſtick of their language. None of the Negro interpreters underſtood this dialect.

A quarrel aroſe between the voyagers, and theſe harmleſs and timid natives, from the ſuſpicion of treachery, natural to thoſe who viſit barbarous nations for the firſt time; and in the ſkirmiſh Gama himſelf was wounded in the foot. This accident haſtened their

[156] Caſtaneda, p. 7.

departure.

departure. They left the Bay on the 16th of November; Alanquer declaring that the cape could not be much farther than thirty leagues diſtant, though he could not deſcribe it, as he had paſſed it without ſeeing [357] it, under the command of Diaz. For the four following days it was a continued tempeſt at ſouth ſouth weſt, during which Oſorius [358] introduces the account of Gama's confining his pilots in irons, and ſtanding to the helm himſelf. Caſtaneda mentions nothing of this circumſtance; his narrative indeed is brief and dry, but ſeems to be a copy of the journal [359]. On the fourth day the danger was ſurmounted; they doubled the Cape on the 20th of November, and getting now the wind in their favour, came to an anchor in the Bay of St. Blas, ſixty leagues beyond the Cape, upon the Sunday following. This Bay ſtill bears the name of St. Bras in our charts; and the natives found here were the ſame as thoſe of St. Helena.

At St. Blas the fleet ſtaid ten days and was ſupplied with oxen by the natives. They found alſo penguins and ſea lions in great numbers. They diſcharged and burnt the victualler, and then proceeded on their voyage to the eaſtward. The rock de la Cruz, where Diaz had erected his pillar, was by eſtimation ſixty-five leagues from St. Blas, and the river Del Infante fifteen farther to the eaſt. When Gama ſet ſail the current was ſtrong againſt him, but having the wind in his favour, which blew a ſtorm from the 8th to the 13th, he puſhed forward till he was ſixty leagues from St. Blas, on the 16th of December. Here he made the coaſt [360], which

[357] I follow the Journal of Caſtaneda; he muſt have ſeen it on his return.

[358] Vol. i. p. 48.

[359] It often glides from the third into the firſt perſon, without appearing conſcious of the change.

[360] Somewhere about Cape Arrecife or Foul Cape.

had a good appearance, with herds of cattle on the ſhore. He paſſed within ſight of de la Cruz, and wiſhed to have come to an anchor at the river Del Infante, but the wind being adverſe, he was obliged to ſtand out to ſea, till on the 20th of December it came again to the weſt, and carried him through the currents which had oppoſed him all round the Cape. The good fortune which attended him in obtaining this wind, at the time when the current was moſt unfavourable, inſpired gratitude in the heart of Gama to that Providence which protected him; he offered up his tribute of thankſgiving, and declared to his people, that he verily believed it was the will of God that India ſhould be diſcovered [361].

From the 20th to the 25th he ran along a coaſt which he ſtyled Terra de Natal, from the celebration of the Nativity on that day. It lies between latitude 32° 30′ 0″ and 30° ſouth; and on the 6th of January 1498 he reached a river which he named De los Reyes, from the feaſt of the Epiphany; he did not anchor here, though in great want of water, but proceeded till the 11th, when he landed at a river called Cobio [362], and which, from the treatment he received, he left afterwards marked with the appellation of Rio dos buonas Gentes, or the River of Good People.

The natives here were no longer Hottentots but Caffres, who even in that age bore the ſame marks of ſuperior civilization, which they preſerve to the preſent hour. A circumſtance more fortunate and more extraordinary was, that Martin Alonzo underſtood their language. This is a moſt remarkable occurence, as Alonzo could ſcarcely have been lower than Mina on the weſtern coaſt, which is forty degrees from the Cape, and the breadth of the continent

[361] Caſtaneda, p. 10. [362] Ibid. p. 11.

from

from weſt to eaſt cannot, in the latitude of 20° ſouth, be leſs than eighteen or nineteen degrees more. What Negro nation or language do we know of ſuch an extent? and yet wonderful as it is, there is no reaſon to doubt the fact. Theſe people had mean houſes, but well furniſhed, and were poſſeſſed of iron, copper, pewter, ſalt, and ivory.

The fleet ſtaid here till the 15th, and obtained, wood, water, fowls, and oxen. Proceeding on that day to the northward, they continued their voyage till the 24th; in this run they paſſed Cape Corrientes and the low coaſt of Sofala without anchoring, till they reached a river, which, from the circumſtances that aroſe, they had afterwards reaſon to call the river of Good Signs[363] (de bons Sinas).

It is a circumſtance particularly noticed by the hiſtorians, that from St. Helena to this place no veſtige of navigation, no ſort of embarkation had been ſeen. But here, upon the morning after their arrival, they were viſited by the natives in boats, which had ſails made of the Palm[364]. This rouſed the attention of every one on board, and in the courſe of a few days two men of ſuperior rank came on board, who had garments of cotton, ſilk, and ſattin; this was the firſt infallible *ſign* of the produce of India, and hope glowed in every heart. The language, however, of their viſitors was unknown; they underſtood not the Negro dialect of Alonzo, nor the Arabick of Alvarez[365], but they intimated by ſigns that they had

[363] Faria, p. 18.

[364] Faria. The expreſſion is not clear, but intimates cloth made of fibres of the coco palm. It is worthy of notice that Caſtaneda mentions *boats* here, but nothing of *ſails* till they approached Moſambique.

[365] Oſorius ſays, one of them ſpoke Arabick very imperfectly, vol. i. p. 51.

ſeen

ſeen ſhips as large as the Portugueſe, and ſeemed to mark the north as the quarter where they might be found.

Here then Gama determined to prepare for the completion of his diſcovery. The natives were quiet; they were not Mahomedans. The women received the ſeamen with complacency, and proviſions were eaſy to be procured. Theſe were all inducements for laying his veſſels a-ground and careening them. He gave orders accordingly; and during a ſtay of more than thirty days, which this ſervice required, no diſpute aroſe to diſturb the harmony between the natives and their viſitors.

This river is the Zambezè, which is navigable for two hundred leagues up to Sucumba[366], and penetrates into the interior of Benomotopa. It falls into the ſea through a variety of mouths, between latitude 19° and 18° ſouth, which are known in our modern charts as the rivers of Cuamo and Quilimanè, from a fort of that name upon the northern branch[367]. I find nothing in Caſtaneda or Faria to mark the extent of Gama's knowledge at this place, but as he had the corrected chart of Covilham on board, in which Sofala was marked as the limit of his progreſs; if that chart was furniſhed with the latitude, Gama muſt have known that he had now paſſed the barrier, and that the diſcovery was aſcertained. The moſt ſouthern branch of the Zambezè is two degrees to the north of Sofala. He muſt likewiſe know that the directions given by Covilham were to inquire for Sofala and the iſland of the Moon[368]. And whether he

[366] Reſſende, p. 80.

[367] I cannot aſcertain which mouth of the Zambezè Gama anchored in. I ſuppoſe it to be the largeſt, which is that moſt to the north, as Reſſende places the river of Good Signs in latitude 17° 50′ 0″. P. Lobo calls Quilimanè the river of Good Signs, p. 202, ed. Paris, Le Grande.

[368] The Iſland of the Moon is an Arabick name and occurs in Al Edriſſi.

underſtood

underſtood the language of the natives or not, the name of Sofala [369] muſt have been pronounced to them in an intercourſe of thirty days, and the quarter where it lay muſt have been obtained.

We are here approaching to a junction with the diſcoveries of the Arabians, the Egyptians, the Greeks, and Romans; and though poſſibly none but the Arabians [370] had been as low as Sofala by Sea, certain it is, if the authority of Ptolemy may be credited, that the Romans had penetrated inland to the ſouthward of the equator, and terminated their reſearches with a nation they ſtyled Agiſymba. Ptolemy [371] mentions two Roman officers, Septimius Flaccus and Julius Maternus, who had been engaged in theſe expeditions to the ſouth, Flaccus from Cyrene [372], and Maternus from Leptis. Flaccus reported that the Ethiopians [of Agiſymba] were three months journey ſouth of the Garamantes, and Flaccus ſeems to have performed this march himſelf. Maternus reported, that when the king of the Garamantes ſet out from Garama to attack the Ethiopians of Agiſymba, he marched four months to the ſouth. Ptolemy does not allow the uſe made of theſe reports by the geographer Marínus, which would carry Agiſymba into 49° or 55° ſouth latitude, ſtill under his own correction he carries Praſum [373] into latitude 15° and Agiſymba ſomewhat farther to the ſouth.

Wonderful as this march of Flaccus is to contemplate, through the very heart and moſt deſert part of Africa into ſuch a latitude, it is ſtill more extraordinary that the latitude of Praſum ſhould coincide with Moſambique, and that two or three degrees farther to the

[369] See Oſorius, p. 52.
[370] And the Phenicians, if Sofala is Ophir.
[371] Lib. i. c. 8.
[372] Libya.
[373] Page 115.

ſouth

ſouth, the kingdom of Benomotapa [374] ſhould occur, in which Zimbao is ſtill the name of a tribe, or as the Portugueſe writers affirm, the court of the ſovereign [375].

It is by no means neceſſary to aſſert, that Moſambique is identically Praſum, or the Zimbaos Agiſymba, but the coincidence of latitude led the Portugueſe almoſt to a man to give credit to the one, and the coincidence of ſound [376] has left a conſtant belief of the other. The Portugueſe pilots were many of them well read in Ptolemy. It is from information of this ſort that Di Barros maintains that Sofala is almoſt ſurrounded by a river iſſuing from a lake called Maravi, which the ancients ſuppoſed to be the origin of the Nile; a charge not very unjuſt, if we conſider that Ptolemy has

[374] Benomotapa is celebrated by all the Portugueſe, as the ſource from whence all the gold duſt at Sofala, and on the coaſt is acquired. There is ſaid to be a gold mine in that kingdom called Manica, and others of ſilver, as Faria affirms, (vol. iii. p. 148.) and gold is alſo found in the ſtreams which come down from the mountains. Theſe mountains, which Rennell calls the Belt of Africa, Di Barros places between the equator and tropick of Capricorn. What their breadth is, or whether they communicate with thoſe of Abyſſinia is ſtill problematical. That they do, is highly probable; and as they throw down the Nile to the north, on the ſouth they may well produce the Zambezè, or rivers of Cuamo or Quilimanè; as well as the Obii and Quilimancè at Patè and Ampaça, and the great lake which all ſpeak of with ſo much uncertainty. We may ſuppoſe all theſe rivers which come to the ſouth productive of gold as well as the river of Benomotapa. And as the kingdom of Abyſſinia in its more flouriſhing ſtate certainly extended its influence to Magadoxo, in latitude 5° north, ſo may we diſcover the means by which, in all ages, the gold duſt of the ſouth found its way into that kingdom. Bruce ſays it has no gold of its own, and yet gold by the ounce, and bricks of ſalt are the current coin of the kingdom. This method of procuring gold in Abyſſinia from the ſouth was known both to the Greeks and Arabs, and muſt apparently have been the primary cauſe of their voyage to the ſouth, and poſſibly of thoſe performed by the Idumeans, Phenicians, and Solomon to Ophir, if Ophir and Sofala be the ſame.

[375] Di Barros, in Ramuſio, p. 261. vol. i. Barboſa, ibid, vol. i. p. 288. Marmol, vol. iii. who copies Di Barros.

[376] D'Anville calls them Zimbas or Muzimbas, and ſeems to think them the ſame as the Gallas, who have been the peſt of Abyſſinia for many centuries paſt. The lake here noticed he firſt introduced into a map compoſed for Le Grande's edition of Lobo in 1728.

brought

brought the ſource of that ſtream into 12° 30′ 0″ ſouth, though Di Barros himſelf is as bold in his aſſertion when he derives from the ſame lake [377] the Zambezè, with all the ſtreams of Cuamo, the Eſpiritu Santo which falls into the ſea below Cape Corrientes [378], and another river which is to traverſe the whole continent into Congo.

At this river of Zambezè we have a right to conſider the diſcovery of Gama aſcertained, as he had here united his circumnavigation with the route of Covilham; but we muſt conduct him to Quilóa, in order to make him meet the limit of the Periplûs at Rhaptum, and to Melinda, before he obtained a pilot to conduct him to the Indies.

It was not till the 24th [379] of February that the fleet was repaired and ready to ſail; and it is remarkable that the people had ſuffered much here from the ſcurvy, notwithſtanding the country is ſaid to have abounded with fruits of various ſorts in abundance; the diſeaſe is imputed to the lowneſs and humidity of the coaſt, and the humanity of Gama is recorded as opening all his own ſtores for the relief of the afflicted. Upon the reſumption of his courſe he kept along the coaſt for ſix days, and upon the firſt of March came in ſight of four iſlands that lie off the port of Moſambique. It is upon the approach to this port that Caſtaneda firſt mentions boats furniſhed with ſails; and no ſooner did this ſight meet the eyes of the navigators than Coello, running up along ſide of his commander,

[377] Marmol ſpeaks of a Lake Zaflan there, which he confounds with the Tſana or Dembea of Habez, p. 156, et ſeq.

[378] See Di Barros, in Ramuſio, vol. *i.* p. 386. et ſeq.

[379] An. 1498.

cried out, "How ſay you, ſir, here is another kind of people," and ſuch indeed they found them, for Moſambique was at this time under the government of Quiloa, the ſovereign of which was maſter of the coaſt from Sofala to Melinda[380], with moſt of the iſlands in the neighbourhood. From the colour of the voyagers they were eaſily miſtaken for Turks[381], with whom the Moors were neceſſarily acquainted in the Red Sea, and for this reaſon, upon the firſt interview every civility was imparted, and pilots granted at their requeſt. With the diſcovery of this miſtake, and the treachery in conſequence of it, we have no concern, but with the appearances that evinced an Indian commerce Gama had every reaſon to be gratified. The veſſels were ſuch as traded along the coaſt, large, but without decks, the ſeams ſewed with cayro, or cordage made of coco, and the timbers faſtened with the ſame without a nail throughout. The ſails were mats compoſed of palm leaves; and many of the larger ſort had charts[382] and compaſſes[383]. The Moors of the Red Sea and India received here the gold of Sofala in exchange for their commodities; and the town, though meanly built, furniſhed abundant ſpecimens

[380] Mombaça excepted, which had revolted, and Melinda was preparing for a revolt.

[381] Moors of Barbary, according to Oſorius. But this is ſuppoſing that the natives of Moſambique knew that they had come round the Cape. It is much more probable that they ſuppoſed them Turks from the Red Sea who had been down to Sofala, or had been driven accidentally to the ſouth.

[382] And quadrants, Oſorius ſays; but perhaps without ſufficient authority. I have not the Latin work of Oſorius, but ſuppoſe he might uſe aſtrolabe, which is rendered quadrant by his tranſlator; this would not prove a knowledge prior to the Europeans, for the Arabick term is aſtharlab, evidently corrupted from the Greek, and ſhews its origin as readily as buſſola. See Chamb. Dict. in voce.

[383] The Arabick term for the compaſs is buſſola, a certain proof that they derived it from the Italians who traded to Alexandria, Mickle, lxxx. See ſupra.

of

of pepper, ginger, cottons, ſilver rings, pearls, rubies, velvet, ſilk, and various other articles of an Indian trade. The inhabitants were moſtly Caffres, but the government was in the hands of Mohamedans from Arabia, and as the commander had ſeveral who could ſpeak Arabick on board, a communication was readily opened, and intelligence ſoon obtained that the voyage to Calicut was regularly performed, and the diſtance about nine hundred leagues.

The fleet remained at Moſambique and in the neighbourhood till the 24th of March, and then made ſail along the coaſt to the northward[384]. I ſhould have been glad to have conducted Gama to Quiloa, as I eſteem it the Rhapta of the Periplûs; and I could have wiſhed to have ended his navigation from Europe where I terminated that of the Greeks from the Red Sea; but partly from treachery and partly from accident, he was carried paſt Quiloa, and proceeded to Mombaça; the ſame treachery attended him at this place as before, which deterred him from entering the port. Some of the people, however, landed and found a city much more ſplendid than Moſambique. Here likewiſe were found all the commodities of India with the citron, lemon, and orange, the houſes built of ſtone like thoſe of Portugal, and the inhabitants chiefly Mohamedans, living with all the ſplendour and luxury of the eaſt.

The ſtay of Gama at this place was only two days, when he proceeded to Melinda and came to an anchor upon the 17th of

[384] It may not be improper to notice that the language of the coaſt ſtyles the courſe to the northward eaſt, and to the Cape weſt. It is thus in the Thames that we call Norway ſhips, Danes, and Swedes, eaſt country ſhips.

March 1498. There is no harbour here but an open road [385], the city, however, was ſplendid and well built, with houſes of ſeveral ſtories, and the appearance of wealth throughout, evinced the extent of their commerce and their communication with India. Here though Gama was not without ſuſpicion, he experienced every act of friendſhip and hoſpitality; and this, becauſe Melinda was inclined to hoſtilities with Quiloa, andready to receive every one as a friend who had experienced injuries in a rival city.

We are here to take our leave of Gama; his diſcovery was aſcertained, and after having conducted him within the boundary of the Greeks and Romans, the object for introducing this narrative of his voyage is anſwered. It is but juſtice, however, to notice, that he reached the long ſought ſhores of India, and viſited Calicut, the centre of Indian commerce, without any particular misfortunes, but ſuch as are natural to a firſt attempt. He returned to Liſbon in 1499, where he received every honour which a generous ſovereign and grateful nation could beſtow.

He was again honoured with the command of a ſquadron in 1502, when the ſtyle of his commiſſion was that of admiral and governor; and he returned [386] a third time in 1524, under the reign of John III. when he was raiſed to the title of viceroy and count de Vidigueira. During this command he died at Cochin in 1525, after having the ſatisfaction of living to ſee the power of his country paramount in the ſeas of India, from Malacca to the Cape

[385] Such as are the Ὄρμοι of the Periplûs.

[386] Faria, vol. i. p. 63, and 280.

of

of Good Hope. A power which ſhe maintained for upwards of a century, and loſt at laſt by the loſs of thoſe virtues by which it had originally been acquired.

Gama was formed for the ſervice to which he was called, violent indeed in his temper, terrible in anger, and ſudden in the execution of juſtice, but at the ſame time intrepid, perſevering, patient in difficulties, fertile in expedients, and ſuperior to all oppoſition. No action can entitle the moſt illuſtrious to the character of great, more than the fortitude he diſplayed when detained in Calicut by the Zamorin, and when he ordered his brother to ſail without him, that his country might not be deprived of the fruits of his diſcovery. To the virtues of a commander he added the religion of a Chriſtian, and though the religion of his age was never without a tincture of chivalry and ſuperſtition, in one ſenſe at leaſt his religion was pure. It was religion that ſupported him under the perils he encountered, and a firm perſuaſion that it was the will of Providence that India ſhould be diſcovered. The conſequence of his diſcovery was the ſubverſion of the Turkiſh power, which at that time threatened all Europe with alarm. The eaſt no longer paid tribute for her precious commodities, which paſſed through the Turkiſh provinces; the revenues of that empire were diminiſhed; the Othmans ceaſed to be a terror to the weſtern world, and Europe[317] has riſen to a power which the other three continents may in vain endeavour to oppoſe. Portugal it is true has loſt her pre-eminence in the eaſt, but ſhe ſtill retains Braſil, which was the accident of her Oriental voyages, and

[317] Such is the opinion both of Abbé Raynal, Mickle, Dr. Campbell, Harris, &c. &c. See in Mickle, p. 83. a citation from Faria to this effect.

which has prolonged her exiſtence as a nation to the preſent hour.

The reader will pardon this digreſſion in favour of a man whom no hiſtorian ever contemplated without admiration, but if the hiſtory of the man does not attach to the purpoſe of the preſent work, the account of his voyage is one of its conſtituent parts. Our deſign has been to ſhew all that the ancients performed, or could not perform, and the voyage of Gama has been detailed, with all its difficulties, in order to prove the utter improbability of any previous navigation round the Cape. I will not ſay it was impoſſible, but I think it impoſſible to have been once performed and never proſecuted; I think it impoſſible that it ſhould have ſtood upon the page of hiſtory as an inſulated fact, through a lapſe of one and twenty centuries, without imitation or repetition of the experiment.

XXVIII. It remains ſtill to ſhew the relative ſituation of the Arabs on this coaſt of Africa, ſuch as the Greeks and Romans left them, and ſuch as the Portugueſe found them upon their arrival in the Eaſtern Ocean. The Periplûs mentions that the Arabs of Rhapta were ſubject to the ſovereign of Maphartis, and Maphartis itſelf was one of the dependencies of Sabéa or Yemen. They employed the veſſels ſewed with coco cordage, from whence the name of the place, and they traded to India, Arabia, the Red Sea, and Egypt. Arabs of the ſame deſcription Gama found here after the expiration of thirteen centuries, the ſame veſſels on the coaſt,

and

and the ſame foreign trade. One circumſtance indeed was different, the religion of Mahomet had at the ſame time introduced ſuperior vigour, and a more extenſive commerce, engendered a hatred to the Chriſtian name, which excited that malice and treachery which Gama experienced, and which, perhaps, without a difference of faith, the rivalſhip in commerce muſt neceſſarily have produced.

Of theſe Arabs there were two diſtinct parties, one called Zaydes or Emozaides, who were the firſt ſettlers upon record, and the other tribe from Baca in the Gulph of Perſia near Bahrein [388]. The Emozaides were hereticks of the ſect of Ali, they came from Yemen, and ſeem to have occupied the coaſt of Africa, after the time of Mahomet, in the ſame manner as their Heathen brethren had ſettled there in the age of the Periplûs. The tribe from Baca were Sonnites or orthodox, who hate the Shiites worſe than Chriſtians; they had ſeized firſt upon Quiloa, and had extended their power for two hundred miles along the coaſt, but from their internal diſſenſions were declining in power when the Portugueſe firſt arrived in the Indian Ocean. Upon the introduction of this tribe from Baca [389], the Emozaides retired inland and became Bedouins [390], they intermarried with the natives, and ſtill exiſt as black Arabs, little diſtinguiſhed from the Caffres who are found both on the continent and in the iſlands [391], which lie in the Moſambique channel, and even in the iſland of Madagaſcar.

The

[388] Di Barros, in Ramuſio, vol. i. p. 386. et ſeq.

[389] If we may judge from Niebuhr they ought to be of the tribe Beni Houle, in Oman.

[390] Wandering tribes that live in tents.

[391] The king of Johanna is perhaps of this caſt,

The whole coaſt below Mombaça was under the power of theſe Sonnites from Baca; but Mombaça had revolted, was independent, and had a ſovereign of its own, who was a Sonnite; while Brava and Magadoxo were ſtyled republicks, where the power was in the hands of twelve [392] principal families forming an ariſtocracy, perhaps as conſpicuous on that coaſt as Venice was in the Hadriatick.

This ſtate of the country is perfectly analogous to the deſcription of it in the Periplûs; every city, ſays that journal, was a ſeparate government, and every government had its independent chief. Such they were in that age, and ſuch they might have continued if an European power had not ariſen, which overwhelmed them all in a period of leſs than twenty years. Sofala, Moſambique, Quiloa, Angoxa, Ocha, Patè, Mombaza, Brava, and the Zanguebar Iſlands,

caſt, half Arab and half Negro, as Sir William Jones ſays the family came from the main. The proper name is Hinzuan, which became Anjuan, and Anjoanè eaſily made Johanna by an Engliſh ſeaman. It is one of the Comora Iſles between Madagaſcar and the continent; and Comora ſtill preſerves the name of Comr, the Arabick name of Madagaſcar, the Iſland of the Moon.

[392] The love of independence is the ruling principle in the mind of an Arab, and a patriarchal ſovereignty is the only one to which he can naturally ſubmit. This it is which drives ſo many petty tribes into the deſerts, which they occupy from Meſopotamia to the frontiers of Morocco, and from the coaſts of the Perſian Gulph to Moſambique. The reſidence in cities is unnatural to them, and though they do occupy places which they have conquered, ſtill every city muſt have its chief, and every chief finds a party within his walls which is hoſtile to his government. Niebuhr has painted this ſpirit of the people moſt admirably throughout his work. But the Mahomedan religion has alſo produced an ariſtocratick principle, ſubſiſting under all the deſpotiſm of the eaſt. The Ulemas, under the Turkiſh government, are an ariſtocracy between the monarch and the people; and whoever is acquainted with Oriental manners, knows that there were families which preſerved a ſort of ruling power in Samarkand, Bagdat, Baſra, and all the principal cities of the eaſt. Such a junction of families might well exiſt at Brava and Magadoxo, when the Portugueſe firſt viſited the coaſt; and any government where there was no oſtenſible chief would ſuggeſt to them the idea of a republick.

all

all ſubmitted to Diego Almeida, and Triſtan d'Acugna before the year 1508. Melinda, which had always been friendly, loſt all her importance, and Magadoxo only reſiſted with effect; but whether from the bravery of the people, or becauſe it lay too much to the north to be of importance, is hard to determine. Had they not been conquered they muſt have ſunk in their importance from the natural courſe of events; the ſinews of their commerce were cut, and their ſhips could not ſail without a Portugueſe paſs. The produce indeed of the coaſt itſelf would ſtill have maintained theſe cities from utter decadence, and brought foreigners to their ports; but the power of the Portugueſe monopolized all profits, till it fell in its turn by the errors of the government, and by the avarice and peculation of its officers. Of all theſe conqueſts which do ſo much credit to their valour, and ſo little to their policy, Moſambique is the only poſſeſſion which has ſurvived the wreck of their empire; and this port is ſaid ſtill to be a profitable ſettlement, and to preſerve an influence over the other ſtates, which have reverted again into the power of the Arabs; among theſe the Imam of Oman is the chief, and Quiloa and Zanguebar are governed by Sheiks of his appointment [391].

It was my intention to have cloſed this account of the coaſt, and this part of the Periplûs, which I call the African Voyage, with ſome particulars relating to the Arabian ſettlements, and their ſituation under the power of the Portugueſe; but the whole of this ſubject has been ſo ably diſcuſſed by the writers of the M. Univerſal Hiſtory, in their twelfth volume, and ſo much more at large than would have been ſuitable to the nature of the

[391] Niebuhr, vol. ii. p. 146. Arabick, Fr. ed.

preſent work, that the labour is not neceſſary. Some particulars I had collected from Reſſendè's MS. in the Britiſh Muſeum, with which they were not acquainted, that might have been acceptable; but in general, the authorities they have followed are ſo genuine, and their own obſervations ſo juſt, as to admit of little farther enlargement upon the ſubject.

Here, therefore, I cloſe the Firſt Part of my deſign, which was to examine the navigation of the ancients on the coaſt of Africa, from their firſt entrance into the Red Sea, to the termination of their progreſs to the ſouth; and to connect their diſcoveries with thoſe of the moderns, by fixing on the voyage of Gama as the point of union. The Second Part will contain two books allotted to Arabia and India, a ſubject leſs obſcure, but ſtill curious rather than amuſing. The materials for the whole are collected, and will be publiſhed as ſoon as they can be reduced into form; but whether that period will be ſhort or diſtant I cannot preſume to calculate. I am fully ſenſible that want of leiſure ought to be conſidered rather as a bar to publication altogether, than pleaded as an excuſe for publiſhing a work incomplete or incorrect. But if time had been taken to complete the whole, it might never have been brought to the preſs; and if the part now edited be incorrect, it is not from negligence, or from miſapplication of ſuch leiſure as I have, but from want of powers to perfect it to my own ſatisfaction. It remains with the

public to decide whether it will be better that the Second Part ſhould be publiſhed or ſuppreſſed.

It is with extreme regret that I am again compelled to advert to the diſagreement between Mr. Goſſelin's opinion and mine, in regard to the limit of ancient diſcovery towards the ſouth. I could have wiſhed to have ſeen his work ſooner, that I might have given it the conſideration it deſerves; or not to have ſeen it at all, that both our opinions might have been left undiſputed, for the judgment of the publick; but I now cannot help obſerving, that although, from the preſſure of time, I am not competent to decide on Mr. Goſſelin's account of the ancient geographers, or the various methods he has aſſumed for correcting their errors, ſtill I cannot but acknowledge his maſterly and ſcientifick poſſeſſion of his ſubject, as well as the great perſeverance of his inveſtigation; and if I differ in opinion from ſuch a writer, I ſtill pay reſpect to his talents and abilities. We differ, it is true, ſeveral degrees upon the extent of the voyage in the Periplûs. But if Mr. Goſſelin will allow, which he does, that it extended beyond Cape Gardefan and Cape D'Affui, then he muſt acknowledge that ſeven mouths of rivers, anſwering to the laſt diviſion of the voyage in the Periplûs, can nowhere be found till we approach the mouths of the Obii. This is the great proof upon which I reſt the queſtion; for ſuppoſing the Pyraláan Iſlands to be defined by the ſtreams of that river, as it divides upon its approach to the ſea, the Periplûs is in perfect harmony with the accounts of the Portugueſe in general, and Reſſende in particular; and if their authority is inſufficient, I know of no better to which an appeal can be made.

THE END OF THE FIRST PART.

APPENDIX.

The APPENDIX contains:

I. AN alphabetical Catalogue of the Articles of Commerce mentioned in the Periplûs, with an Account of their Nature and Properties, as far as is requiſite for the Elucidation of the Journal.

II. AN Account of the Adulitick Inſcription found in Abyſſinia by Coſmas Indicopleuſtes, a Monk of the ſixth Century.

III. AN Inquiry into the corrupt Reading of the Manuſcript, in regard to the Word, Ἐιτενηδιωμμενηθεσίας.

IV. THE Form of the habitable World as imagined by Pomponius Mela, Coſmas, and Al Edriſſi.

N. B. *As theſe ſeveral Particulars are deſigned for the whole Work when completed; they commence again with page* 1, *and will be accompanied by ſome other Diſquiſitions on the Winds and Monſoons, on the Site of Meroè, and on the Limit of ancient Diſcovery towards the Eaſt, with farther Inquiries, if authentick Materials can be obtained. The Second Part of this Work will contain the Arabian and Eaſt Indian Navigation of the Periplûs, with the Pages numbered in order from Part the Firſt.*

ARTICLES *of* COMMERCE *mentioned in the* PERIPLUS MARIS ERYTHRÆI *aſſigned to* ARRIAN.

A

1. Ἀβολλαι. *Abollæ.*

IF this term be Greek, it is remarkable that it ſhould not occur in any Greek Lexicon, and if it is Latin (as apparently it is), it is equally remarkable that a Greek merchant of Alexandria, ſuch as the author probably was, ſhould have introduced a Latin[1] term into his Greek catalogue; but Latin terms crept into purer Greek writers than our author, and commerce perhaps had adopted this, as expreſſing the actual garment which was neither uſed by, or formerly known to the Greeks. The Roman Abolla was a military cloke[2], perhaps not unlike our watch cloke. And the adoption of the word is not more ſtrange than the uſage of the Engliſh in adopting the French *Surtout*, or the French adopting the Engliſh *Redingote* (Riding Coat).

[1] The word Abolla is not in Du Cange.

[2] It ſeems worn as an outer military cloke by officers and men of rank. Ptolemy, ſon of Juba king of Mauritania, grandſon of M. Antony by Seléné the daughter of Cleopátra, was killed by Caligula, who was a great grandſon of Antony, non aliâ de cauſâ quam quod edente ſe munus, ingreſſum ſpectacula converſe oculos hominum fulgore purpureæ *abollæ* animadvertit. Suet Calig. c. 35. It was likewiſe a garb of the Philoſophers, audi facinus majoris Abollæ. Juvenal.

2. Ἄξ λοι νόθοι χρωμάτινοι.

Single cloths dyed and imitating ſome of a ſuperior or different quality. But ſee Salmaſ. ad Vopiſcum.

Ἄξολοι, according to Salmaſius (Plin. Exercit. 1062,) are ſingle cloths, the ſame as ἁπλόϊδες, in oppoſition to διπλόϊδες, or double; but whether this relates to the texture, to the ornaments wrought on them, or the conſideration of their being with lining or without, ſeems difficult to determine. Our weavers call a ſilk, *ſhot*, when the warp is of one colour and the woof of another; and the word Ἄξολοι may be literally rendered *unſhot*; but it does not follow that this is an accurate rendering of the term. Homer mentions garments both ſingle and double; and Deborah makes the mother of Siſera ſay, that her ſon had perhaps brought home a raiment of needle work, of needle work *on both ſides*, which is apparently correſpondent to the tunick, which Ulyſſes deſcribes to Penelopé (Od. lib. T. 230.). If this interpretation, therefore, ſhould be admiſſible, Ἄξολοι χρωμάτινοι may be rendered *plain cloths of one colour*, and νόθοι would expreſs, that they were of an inferior quality. But ſee the term διπλοείματος, Diog. Laertius in Diogene, p. 350. Horace. *Duplici panno* patientia velat. And the addreſs of Plato to Ariſtippus in Diog. Laert. Ariſtip. p. 67. Σοὶ μόνῳ δέδοται καὶ χλαμύδα φορεῖν καὶ ῥάκος. "You are the only Philoſopher who can aſſume with equal "propriety the dreſs of a gentleman (χλαμύδα), or the ordinary "garb (ῥάκος) of a cynick."

3. Ἀδάμας. *Diamond.*

The ancients certainly apply this word to our modern gem the diamond, but uſe it in a larger ſenſe as we ſtill uſe adamant, applied to

to other hard ſubſtances. But in the only paſſage where it occurs in the Periplûs, it is mentioned on a coaſt where diamonds very probably were to be purchaſed, and is joined with the Hyacinth or Jacinth, and other tranſparent ſtones.

4. Ἀλόη. *Aloe.*

There are two ſorts of Aloe, one a bitter cathartick, and another an aromatick, by ſome ſuppoſed to be the ſandal-wood. See Salm. Plin. Ex. 1056. It is probably uſed by the author of the Periplûs in the former ſenſe, as being mentioned on the coaſt of Oman in Arabia, where the Succotrine Aloe is naturally imported, as the iſland Socotra itſelf was under the power of the Arabs on the main, being ſubject to Eleazus king of Sabbatha, in the neighbourhood of Oman.

5. Ἀνδριάντες. *Images.*

Theſe are mentioned as imported into Oman in Arabia, but whether as merely ornamental, or objects of ſuperſtition, does not appear.

6. Ἀργυρώματα, Ἀργυρᾶ σκέυη, Ἀργυρώματα τετορευμένα. *Plate, Plate poliſhed.*

Theſe works in ſilver do not appear to be the beautiful produce of Greek artiſts, but veſſels of plate adapted to the market. By the frequent mention of theſe articles they muſt have formed a conſiderable branch of commerce.

7. Ἀρσενικὸν.

7. Ἀρσενικὸν. *Arſenick.*

8. Ἀρώματα. *Aromaticks.*

Drugs in general are comprehended under this term (Sal. Plin. Ex. p. 1049, 1050).

9. Ἀσύφη. *A ſpecies of Cinnamon.* See Κασσία.

B

Βδέλλα. *Bdellium.*

An Aromatick gum, ſuppoſed to be imported from Africa, but now ſeldom uſed [3]. Salmaſius [4] deſcribes it as a pellucid exudation from the tree ſo called, not quite clear, of a waxy ſubſtance, and eaſily melted, called by the Portugueſe *anime*; there are three ſorts, Arabic, Petræan, and Bactrian. It was imported, according to the Periplûs, from Binnagara, or Minnagara [Bekker,] in Scindi, and from Barygaza [Baroach,] in Guzerat.

The בְּדֹלַח Bhedolahh of ſcripture, Gen. ii. 12. Num. xi. 7. rendered Bdellium, is by the Rabbis rendered Chryſtal, and has nothing in common with the Bdellium of the Periplûs but its tranſparency. The word Bdellium ſeems a diminutive of the Bdella uſed by our author. Pliny, b. xii. c. 9.

There are ſtill found three ſorts, two African, rather of dark brown hue, and one Aſiatick, anſwering the deſcriptions of Salmaſius, generally brought to England among parcels of myrrh. There are ſpecimens of the African ſort in the collection of Dr. Burgeſs.

[3] Chambers in voce. [4] Plin. Ex reit. p. 1150.

Burgeſs.

Γ

Γίζειρ. Ζίγειρ. Γίζι. *A ſpecies of cinnamon.* See Κασσία. Zigeer in Perſick ſignifies ſmall.

Δ

Δικρόσσια, p. 8. *Dicroſſia.—Cloths either fringed or ſtriped.*

Κορσάι and κροσσάι, according to Salmaſius [5], from Heſychius, ſignifies the ſteps of a ladder, or in another ſenſe, the cornice of a wall, or the battlements. Salmaſius derives the word from κείρω, to ſhave, and interprets κόρσοι, locks of hair. Hence cloths, δικρόσσια, he ſays, are thoſe which have a fringe knotted or twiſted.

But Homer uſes the word twice. 1ſt. Κρόσσας μὲν πύργων ἔρυον καὶ ἔρειπον ἐπάλξεις. M. 258, where it agrees with the interpretation of Heſychius, the cornice of the wall, or as it may be rendered the *ſtep* of the parapet, a *rim* or *line* running round below the battlements. Not differing, perhaps, from the uſage of the word as uſed Ξ 35, where Homer ſays, the ſhips were too numerous to be drawn up on the ſhore in one *line*. Τῷ ῥα προκρόσσας ἔρυσαν [6], they therefore drew them in *lines* one behind another like the ſteps of a ladder. Agreeable to the other explanation of Heſychius, or as Apollonius renders it, ἀποκρηπιδώματα, in *ſtripes* [7].

We may therefore conclude, that we cannot err much in rendering the Δικρόσσια of the Periplûs, either cloths *fringed*, with Salmaſius,

[5] Plin. Exercit. p. 762. [6] See Lennep in voce. [7] See Apolon. Lexicon in voce.

or

or *ſtriped* with Apollonius. So Virgil, virgatis lucent ſagulis. The term uſed here is in conjunction with cloths. Ἄβολοι ..... καὶ λέντια καὶ δικρόσσια, where perhaps ἄβολοι is in oppoſition to δικρόσσια, λέντια is the Latin word Lintea.

Δηνάριον. *Denarius.—The Roman coin, worth in general denomination nearly 8d. Engliſh.*

It appears by the Periplûs, that this coin was carried into Abyſſinia for the ſake of commerce with ſtrangers, and that both gold[8] and ſilver Denarii were exchanged on the coaſt of Malabar againſt the ſpecie of the country with advantage to the merchant.

Δέακα, Κιττὰ, Δάκαρ,

Are joined in the Periplûs with Kaſſia, and are ſuppoſed to be inferior ſpecies of the cinnamon. See Ramuſio, in his diſcourſe on the voyage of Nearchus, and Salmaſ. de Homonymiis Hyles Iatrices, c. xcii. c. xciii. a work referred to by Salmaſius himſelf, but I have not ſeen it.

Δούλικα.

Slaves of a better ſort and for the Egyptian market.

E

Ἔλαιον. *Oil of Olives.*

Ἐλέφας. *Ivory.*

Εὐώδια. *Fragrant ſpices or gums.*

[8] The gold Denarius, according to Arburthnot was the 45th part of a pound of gold in the age of Nero.

[9] Plin. Exercit. p. 1070.

Ζῶναι

Z

Ζῶναι σκιωτὰι.

Girdles or purſes wrought or embroidered. A great commerce throughout the eaſt is ſtill carried on in faſhes, ornamented with every ſort of device, and wrought up with great expence. *Σκιωτὰι* does not occur in the lexicons, but probably means *ſhaded* of different colours.

Ζίγγιβερ. Ginger.

Not mentioned in the Periplûs, but by Salmaſius [10], who ſays the ancients knew little of it, and believed it to be the root of the pepper plant.

H

Ἡμίονοι νωτηγοὶ. Mules for the ſaddle.

Θ

Θυμίαμα μοκρότυ. Gums or Incenſe.

I

Ἱμάτια βαρβαρίκα ἄγναφα τὰ ἐν Αἰγύπτῳ γινόμενα. Cloths,

For the Barbarine[11] market, undreſſed and of Egyptian manufacture.—The Barbarines are the ancient Troglodyte ſhepherds of

[10] Plin. Exercit. p. 1070.

[11] The weſt coaſt of the Gulph of Arabia.

Upper Egypt, Nubia, and Ethiopia, very graphically traced and diſtinguiſhed by Bruce.

Ἱμάτια βαρβαρίκα σύμμικτα γεγναμμένα. *Cloths,*

For the Barbarine market, dreſſed, and dyed of various colours.

Ἱματισμὸς Αραβικὸς χειριδωτὸς ὁτε ἁπλᾶς ϰ᾽ ὁ ϰοινὸς ϰ᾽ σϰοτυλάτος ϰ᾽ διάχρυσο. *Cloths*

Made up, or coating for the Arabian market.

1. Χειριδωτὸς.

With ſleeves reaching to the wriſt.

2. Ὁ τε ἁπλᾶς ϰ᾽ ὁ ϰοινὸς. See Ἁβολὸι.

3. Σϰοτυλάτος.

Wrought with figures. From the Latin Scutum, Scutulatus; the figure being in the form of a ſhield. A dappled grey horſe is thus called Scutulatus.

4. Διάχρυσος. *Shot with Gold.*

5. Πολυτελὴς.

Of great price.

6. Νόθος.

In imitation of a better commodity.

7. Περισσότερος.

Of a better quality, or in great quantity.

8. Παντοῖος.

8. Παντοῖος.

Of all ſorts.

9. Πολύμιτα πολύμπα.

Of thicker woof, or larger woof than warp.

Ἵπποι. *Horſes.*

As preſents, and as imports *into* Arabia.

K

Κάγκαμος. *Kankamus—Gum Lack,*

According to Scaliger; and Dioſcorides calls it a gum. But Salmaſius rather inclines to think it a drug like myrrh. Lack was uſed as a purple or blue dye by the Indigo dyers. Ἰνδικοβαφοι. Salmas. Plin. Exercit. 1148. 1152. Plin. xii. 20. See Pomet's Hiſtory of Drugs, b. viii p. 199, who ſays gum of four colours was found in one lump. He does not hold it to be Gum Lack, but that it has a ſmell like it; it is found in Africa, Braſil, and Saint Chriſtopher's. Pomet's Specimen was from the Weſt Indies.

Κάλτις. *Kaltis—A Gold Coin.*

According to the Periplûs it was a coin of this name current in Bengal, and that the metal was collected from a mine in the neighbourhood. Stuckius ſays, a coin called Kalais is ſtill current in Bengal, on what authority does not appear. Paolino notices the word, but I cannot recal the paſſage to my memory.

Καρπάσος. *Karpaſus—Fine Muſlins.*

Oppoſed to ordinary cottons. It is remarkable that the native Shanſkreet term is *Karpaſi*, as appears by Sir William Jones's catalogue. Aſiat. Reſ. vol. iv. p. 231. Calcutta edition. But how this word found its way into Italy, and became the Latin Carbaſus (fine linen) is ſurprizing, when it is not found in the Greek language. The Καρπάσιον λίνον of Pauſanias (in Atticis), of which the wick was formed for the lamp of Pallas, is Aſbeſtos, ſo called from Karpaſos a city of Crete. Salm. Pl. Exercit. p. 178.

Κασσία. *Caſia.*

This ſpice is mentioned frequently in the Periplûs, and with various additions, intended to ſpecify the different ſorts, properties, or appearances of the commodity. It is a ſpecies of cinnamon, and manifeſtly the ſame as what we call cinnamon at this day; but different from that of the Greeks and Romans, which was not a bark, nor rolled up into pipes like ours. Their's was the tender ſhoot of the ſame plant, and of much higher value, ſold at Rome in the proportion of a thouſand denarii [12] to fifty; it was found only in the poſſeſſion of Emperors and Kings; and by them it was diſtributed in preſents to favourites, upon ſolemn occaſions, embaſſies, &c. This ſort we muſt firſt conſider, becauſe they themſelves applied the name improperly, having it derived by their own account from the Phenicians [13], and giving it to the ſame production, though in a different form and appearance from that by which it is known to us.

[12] Pliny.

[13] Herodotus, lib. iii. p. 252. ed. Weſſ.

The

The kinnamomum of the Greeks and Romans was neceſſarily derived from the Phenician [14], becauſe the merchants of that country firſt brought it into Greece. The Greeks themſelves had no direct communication with the eaſt, and whether this ſpice was brought into Perſia [15] by means of the northern caravans, or by ſea into Arabia, the intermediate carriers between either country and Greece were of courſe Phenicians. It will therefore be no difficult matter to prove that the Phenician term expreſſes the cinnamon we have, and not that indicated by the Greeks and Romans. The term in all theſe languages ſignifies a pipe, for the Hebrew קָנֶה Kheneh, is the Latin Canna; and Syrinx, Fiſtula, Cannella, and Cannelle, convey the ſame idea in Greek, Latin, Italian, and French. The Hebrew term occurs in Exodus xxx. 23, 24, joined with Caſia, as it is almoſt univerſally in the writings of the Greeks and Romans. It is ſtyled ſweet cinnamon, and is written קִנְמָן בֶּשֶׂם [16], Khinemon Beſem, the ſweet or ſweet ſcented pipe; and the word rendered Caſia by our tranſlators [17] is קִדָּה, Khiddah, from Khadh to ſplit or divide longways. Theſe two terms mark the principal diſtinctions of this ſpice in all theſe languages, as Khinemon Beſem, Hebrew; Caſia Syrinx, Greek; Caſia Fiſtula [18], Latin; Cannelle,

[14] See a curious miſtake of Pliny's noticed by Larcher, of turning the Phenicians into a Phœnix. Tom. iii. p. 349.

[15] By Perſia is meant the whole empire.

[16] The whole 33d. chapter is worth conſulting on this curious ſubject, as it proves that many of the Oriental ſpices and odours were even in that early age familiar in Egypt.

[17] If from this chapter of Exodus we prove that cinnamon was known to the Hebrews in the age of Moſes, we have a ſecond proof of its being uſed in the embalment of the Mummies from Diodorus, lib. i. xci. tom. i. p. 102. Larcher, tom. ii. p. 374.

[18] The Caſia Fiſtula of the moderns is a drug totally diſtinct, it is a ſpecies of ſenna which comes from the Levant, Egypt, Braſil, and the Antilles, and is a corruption from Acacia. Salm. Plin. Ex. p. 540. Certe Caſiæ nomen pro ea ſpecie quæ ſolvit alvum ex *Acacia* factum quamvis diverſum ſit genus, Id. p. 1056. This corruption is not of very modern date, for Salmaſius adds, ut mirum ſit ante hos trecentos et amplius annos, Caſiam Fiſtulam

Cannelle, French; Khiddah, Hebrew; Xylo-Caſia [19], Greek; Caſia Lignea, Latin.

Whether the Greeks and Latins derive their term from the Hebrew khine-mon [20], or from the compound kheneh-amomum, is not ſo eaſy to determine, for amomum is a general term [21] for any drug or ſpice, and kin-amomum in this form would be again the ſpice-canna, the caſia fiſtula under another deſcription. But that the caſia fiſtula and the caſia lignea are marked as the two leading diſtinct ſpecies, from the time of Moſes to the preſent hour, is ſelf evident. And I now ſay, that if the Romans applied the term cinnamon to the tender ſhoot of this plant, and not to the pipe cinnamon, ſuch as we now have it from Ceylon, their uſe of the word was improper. That this was the caſe there is reaſon to think, but that there was ſome obſcurity, or fluctuation in their uſage is certain alſo.

Salmaſius [22] quotes Galen to prove that the plant itſelf was brought to the emperor Marcus Aurelius, from Barbarikè [23], in a caſe ſeven

Fiſtulam Latinis dictam, eam quæ purgandi vim habet. See alſo Ramuſio, vol. i. p. 282.

[19] This ſpecies is diſtinctly marked in the Roman Law de publicanis, leg. xvi. D. Caſia-Syrinx, Xylo-Caſia. Salm. 1055, id. in Canticis Salomonis Nardus, Crocus, Fiſtula cinnamomum. It is called Σκληροτερὰ, Hard Caſia, in the Periplûs.

[20] קִנָּמֹן is from קָנֶה, a reed, canna, and the termination doubtful, but probably from מָנָה מָן, peculiar. It is in this ſenſe that מָנָה, manna ſignifies the food from Heaven. The *peculiar* food or bread. And hence קִנֶּהָמֹן, the peculiar canna, by way of pre-eminence. Parkhurſt derives it not from קָנֶה, canna, but from קָנַם, khanam, to ſmell ſtrong, but he allows there is no ſuch verb in Hebrew. I cannot help thinking that קְנֵה בֶשֶׂם, khenneh beſem, and קִנָּמֹן בֶּשֶׂם, khinnemon beſem, have the ſame root. The ſweet khenne, the ſweet khinnemon. Notwithſtanding khenneh beſem is rendered calami odoriferi, the ſweet calamus, it is certainly not technically the calamus aromaticus.

[21] Salm. 401.

[22] Plin. Ex. p. 1304. Galen de Antidotis, lib. i.

[23] Barbarikè is perhaps not a proper name, but the port frequented by the Barbars of Adel or Moſyllon. It is the mart in Scindi, but whether Patala or Minnagara, is difficult to determine.

feet long. Galen ſaw this, and there were other caſes of a ſmaller ſize, containing ſpecimens of an inferior ſort. This, therefore, muſt be in a dry ſtate; but this he ſays was the true cinnamon. Undoubtedly it was, for the plant itſelf, and the ſpice, as we have it, in its uſual form, have this difference and no more. But Galen ſays, in another paſſage[24], that caſia and cinnamon are ſo much alike that it is not an eaſy matter to diſtinguiſh one from the other. And Dioſcorides writes, "Caſia grows in Arabia; the beſt ſort is "red, of a fine colour, almoſt approaching to coral, ſtrait, long, "and pipy, it bites upon the palate with a ſlight ſenſation of heat, "and the beſt ſort is that called Zigir, with a ſcent like a roſe." This is manifeſtly the cinnamon we have at this day; but he adds, "cinnamon has many names, from the different places where it [is "procured or] grows. But the beſt ſort is that which is like the "caſia of Moſyllon, and this cinnamon is called Moſyllitick, as "well as the caſia." This therefore is only a different ſort of the ſame ſpice, but it does not grow either in Arabia or at Moſyllon, it took its name from either country, as procured in the marts of either. This traffick is explained in the Periplûs, but Dioſcorides was unacquainted with it. The deſcription[25] he gives of this cinnamon is, "That when freſh, and in its greateſt perfection, it is of a "dark colour, ſomething between the colour of wine and [dark] "aſh, like a ſmall twig or ſpray full of knots, and very odoriferous." This is manifeſtly not our cinnamon, but the ſame as Galen's, the tender ſhoot and not the bark. It is worth remarking that Dioſcorides lived in the reign of Nero[26], and if the true ſource of cinnamon was

[24] See Ramuſio, vol. i. p. 282. The whole of this is from Ramuſio.

[25] See Larcher's whole Diſſertation, tom. iii. p. 348. He is equally indebted to Salmaſius as myſelf.

[26] Hoffman in voce.

then

then juſt beginning to be known by means of the navigation detailed in the Periplûs, this knowledge had not yet reached Aſia [27] Minor or Rome. Pliny who lived a few years later had juſt arrived at this information, for he ſays expreſsly, Moſyllon was the port to which cinnamon was *brought* [28], and conſequently the port where it was procured by the Greeks from Egypt, and through Egypt conveyed to Rome. It had long been procured there, and long obtained the name of Moſyllitick, but it was now known not to be native, but imported at that place.

The trade to Moſyllon was opened by the Ptolemies; ſtill before the exiſtence of a Grecian power in Egypt, the Greeks had probably little knowledge of it, but from the importation of it by the Phenicians; and the Phenicians received it, either by land carriage from the Idumeans of Arabia, or when they navigated the Red Sea themſelves with the fleets of Solomon, they obtained it immediately from Sabêa; perhaps alſo, if Ophir is Sofala on the coaſt of Africa, they found it either at that port, or at the others, which the Greeks afterwards frequented. Theſe lay chiefly in Barbaria, (the kingdom of Adel,) comprehending the ports of Moſyllon, Malao, and Mundus, where it was poſſibly always to be met with. This commerce indeed is at beſt only conjectural, neither could it be of long duration, as it ended with the reign of Solomon, and was never reſumed; but that the Phenicians had a ſettled intercourſe with Sabêa we learn incontrovertibly from Ezekiel [29], and that Sabêa was the centre of Oriental commerce, is proved in our account of the Periplûs.

[27] Dioſcorides was a native of Anazarba, but whether he wrote there or at Rome, I have not been able to diſcover.

[28] Portus Moſyllites quo cinnamomum *devehitur*. Lib. vi. c. 29.

[29] Cap. xxvii. v. 23. Sheba is Sabêa.

It

It is this circumſtance that induced all the early writers to impute the produce of India to the ſoil of Arabia; an error which commenced with the firſt hiſtorians extant, and which exiſted in hiſtory till the age of Pliny, and in poetry almoſt to the preſent hour. Fable is the legitimate progeny of ignorance; we are not to wonder therefore when we read in Herodotus [30], that caſia grew in Arabia, but that cinnamon was brought thither by birds from the country where Bacchus was born, that is India. The term uſed by Herodotus indicates the cinnamon we now have, for it ſignifies the peel, hull, or rind [31] of a plant, and evidently points out the bark under which form we ſtill receive this ſpice. The error of Herodotus is repeated by Theophraſtus, who aſſigns both caſia and cinnamon to Arabia [32]; this intelligence I receive from Bochart, and I am obliged to him alſo for a very curious citation from Uranius, in Stephanus de Urbibus, who ſays, the country of the Abaſenes produces myrrh, aromatick gums, or odours, frankincenſe, and the bark [of cinnamon] [33]. This paſſage is valuable as the firſt inſtance extant in which the name of Abyſſinians is mentioned. But it is not to be depended on, unleſs it can be referred to the conqueſts of that nation in Arabia, for theſe Abaſeni are evidently joined with the Arabians of Sabêa and Hadramaut.

But whatever errors are to be found in ancient authors, relative to the production of ſpices in general, and cinnamon in particular,

[30] Lib. iii. p. 252. ed. Weſſ. and p. 250, where he mentions a ſimilar fable of ſerpents which guard the frankincenſe.

[31] Κάρφια, from Κάρφω, arefacio, to dry, and hence the dry hull, peel, or ſhell of a plant or fruit.

[32] Bochart, vol. i. p 105. Sir William Jones, Aſ. Reſ. iv. 110. 113.

[33] Ἡ χώρα τῶν Αβασηνῶν φέρει καὶ ὄσσον [quod ὄζει] καὶ θυμίαμα καὶ ΚΕΡΠΑΘΟΝ. Bochart, vol. i. p. 106 Κέρπαθον is probably the Κάρφια of Herodotus, unleſs it is a falſe reading for Κάρπαθον or Κάρπασον, one of the terms for cotton.

ſtill that they found their way into Egypt, Paleſtine, Greece, and all the countries bordering on the Mediterranean, in the earlieſt ages, is a fact. This admits of proof from the thirtieth chapter of Exodus, and we have traced the courſe of their introduction in the preliminary diſquiſitions of the firſt book.

We may now, therefore, proceed to examine the various ſorts of this ſpice, mentioned in the Periplûs, which amount to ten; and very remarkable it is, that the modern enumeration of profeſſor Thunberg ſhould comprehend juſt as many ſpecies. Not that it is to be ſuppoſed the ſpecies correſpond, but the coincidence of number is extraordinary. It is worthy of notice alſo, that cinnamon is a term never uſed in the Periplûs, the merchant dealt only in caſia, cinnamon was a gift for princes; there is even in this minute circumſtance a preſumption in favour of his veracity, not to be paſſed without obſervation.

His ten ſorts are,

1. Μοσυλλιτικὴ. *Moſyllitick.*

So called from the port Moſyllon, where it was obtained by the Greeks from Egypt, and whither they always reſorted from their firſt paſſing the Straits of Bab-el-Mandeb. It was the caſia fiſtula, the ſame as we now have from Ceylon, and imported at Moſyllon directly from India, or from the Arabian marts on the ocean, which were rivals of the Sabêans. It is mentioned by ſeveral authors as the beſt ſort, or inferior only to Zigeir, and therefore could not be native: there is indeed cinnamon on the coaſt of Africa, but it is hard,

hard, woody[34], and of little flavour. The regio cinnamomifera of Ptolemy, bears no other ſort but this; he places this tract at the boundary of his knowledge, that is, between Melinda and Moſambique, and if it is in any way entitled to the name, it cannot be from its own produce, but on account of the importation of the ſpice from India; the traders who found it there, might ſuppoſe it native, in the ſame manner as the early writers ſpeak of the Moſyllitick, and which (as has been already noticed,) Pliny firſt mentions as imported. The Moſyllitick ſpecies is rarely called cinnamon by the ancients, but caſia only. Their cinnamon was exhibited as a rarity, as that of Marcus Aurelius before mentioned. Antiochus Epiphanes[35] carried a few boxes of it in a triumphal proceſſion; and Seleucus Callinicus preſented two minæ of this ſpecies, and two of caſia, as the gift of a king to the Mileſians. The caſia or modern cinnamon was found formerly in Java, Sumatra, and the coaſt of Malabar; from the coaſt of Malabar it found its way to Africa and Arabia; but when the Dutch were maſters of Cochin[36], they deſtroyed all the plants on the coaſt, in order to ſecure the monopoly to Ceylon; and none is now met with on the coaſt, but an inferior wild ſort, uſed by the natives, and brought ſometimes to Europe for the purpoſe of adulteration.

[34] Seven different ſorts Oriental, and two American, I have ſeen in the collection of Dr. Burgeſs; and an African ſpecies which is not a bark, but a mere ſtick, with little flavour. It anſwers well to the character of σκληροτερὰ.

[35] Athenæus, lib. v. p. 195. lib. ix. p. 403.

[36] The Dutch are accuſed of this by their rivals, as well as diminiſhing the growth of nutmegs, &c. in the Molucca iſlands. But I obſerve in the account of Hugh Boyd's embaſſy to Ceylon (Ind. Annual Regiſter, 1799), an aſſertion, that the true cinnamon never grew any where but in Ceylon.

2 Γίζειρ, Ζίγειρ, Γίζι. *Gizeir*, *Zigeir*, *Gizi*.

This ſort is noticed and deſcribed by Dioſcorides, as already mentioned; and to his deſcription I can only add, that Zigeir, in Perſian and Arabick, as I am informed, ſignifies *ſmall* [37]. The ſmaller bark muſt of courſe be from the ſmaller and tenderer ſhoots, which is ſtill eſteemed the beſt; the harder and thicker bark is cut and made to roll up in imitation of this, but is inferior, though from the ſame plant. This at leaſt is ſuppoſed; but I do not ſpeak from authority.

3. Ἀσύφη. *Aſyphè*.

This term, if not Oriental, is from the Greek ἀσύφηλος, aſyphélos, ſignifying *cheap* or *ordinary*, but we do not find aſyphè uſed in this manner in other authors; it may be an Alexandrian corruption of the language, or it may be the abbreviation of a merchant in his invoice.

4. Ἄρωμα. *Aroma*.

Aroma is the general name for any ſweet-ſcented drug, but it is twice inſerted in a liſt of caſias, and is therefore probably a ſpecies as well as the others. It would intimate an aromatick ſmell or flavour, and is poſſibly one of ſuperior quality. It is remarkable that Moſes uſes the ſame term of ſweet-ſcented cinnamon.

5. Μώγλα. *Mógla*.

A ſpecies unknown.

[37] I doubt this relation at the ſame time I notice it; but an inquiry might ſtill be made, whether the Greek term *caſia* be not a corruption of *gizi*.

6. Μοτώ.

6. Μοτὼ. *Motô.*

A ſpecies unknown.

7. Σκληροτεραὶ. *Sclerotera.*

From the Greek Σκληρὸς, hard. This is a term which occurs frequently, and perhaps diſtinguiſhes the caſia lignea (wood cinnamon), from the caſia fiſtula, (cannelle or pipe cinnamon,) it may, however, ſignify only a hard and inferior ſort, in oppoſition to brittleneſs, which is one of the characters of the ſuperior ſpecies.

8, 9, 10. Δύακα, Κιττὰ, Δάκαρ. *Duaka, Kitta, Dacar.*

All unknown. But Salmaſius and other commentators agree in ſuppoſing them all to be ſpecies of the ſame ſpice.

Theſe are the ten ſorts enumerated in the Periplûs[38]. Profeſſor Thunberg, who viſited Ceylon in his voyage from Batavia, reckons ten ſorts likewiſe. Four of nearly equal value and excellence, three that are found only in the interior above the Ghauts[39], in the government of the king of Candi; and three which are not worth gathering. The moſt remarkable which he mentions are:

The raſſe[40] or penni-curundu, honey cinnamon, and capuru curundu, or camphor cinnamon, from the root of which camphor is diſtilled; this laſt is found only in the interior. The cinnamon for the European market was collected in the woods by the natives

[38] Two other ſorts may be collected from Galen; Arebo, and Daphnite. Larcher, Herod. vol iii p. 345.

[39] I uſe the term improperly, but Ceylon partakes of the nature of the continent, the coaſt is a level, the interior is high and table land. All above the mountains is ſtill poſſeſſed by the king of Candi; the Dutch had, and Engliſh have, only the coaſt.

[40] See Knox's Hiſtory of Ceylon, p. 16.

employed

employed in the Dutch ſervice, but has ſince been planted on the ſandy downs on the coaſt; theſe plantations, beſides their convenience, are ſo thriving, that the practice is likely to be continued. Can I conclude this account without obſerving that this rich and valuable iſland is now in the poſſeſſion of the Engliſh, and without a prayer that the commerce may be conducted on more liberal principles, and the natives treated more generouſly by them than by their predeceſſors. The knowledge which the ancients had of this iſland will be treated at large in the Second Part of the Periplûs, and it is to be hoped that the preſent governour Frederick North, whoſe mind is ſtored with ancient knowledge, and whoſe attention is alive to modern information, will communicate his reſearches to the publick.

I have only to add, that the Shanſkreet names of this ſpice are ſavernaca and ourana, as I learn from the Aſiatick Reſearches, vol. iv. p. 235. and that Salmaſius mentions ſalihaca as the Arabick appellation, which he derives from the Greek Ξυλικὴ, lignea, or woody, (p. 1306.) but which, if I did not pay great reſpect to his authority, I ſhould rather derive from Salikè the Greek name of the iſland in the age of Ptolemy. I have now only to requeſt that this detail, too prolix for the work, may be accepted by the reader, not as the natural but the claſſical hiſtory of cinnamon.

Κασσίτερος. *Tin.*

Tin is mentioned as an import into Africa, Arabia, Scindi, and the Coaſt of Malabar. It has continued an article of commerce brought out of Britain in all ages, conveyed to all the countries on the Mediterranean, by the Phenicians, Greeks, and Romans, and carried

ried into the Eaſtern Ocean from the origin of the commerce. It is only within theſe few years it has found its way into China in Britiſh veſſels, where it is now become an article of ſuch magnitude, as greatly to diminiſh the quantity of ſpecie neceſſary for that market.

Καττυβυρίνη, Πατροπαπίγη, Καβαλίτη. *Kattyburinè, Patropapigè, Kabalitè.* Peripl. p. 28.

Different ſpecies of nard. See Νάρδος.

Καυνάκαι απλοῖ ὲ πολλῶ. *Kaunakai.*

Coverlids plain of *no great value*, (or according to another reading, *not many*,) with the knap on one ſide. Heſychius and Phavorinus, cited by Hudſon.

Κολανδιόφωντα. *Kolandiophonta.*

Large Ships on the coaſt of Travancour, in which the natives traded to Bengal and Malacca. They had veſſels alſo called Sangara, made of one piece of timber, which they uſed in their commerce on the coaſt of Malabar. The Monoxyla of Pliny, employed in bringing the pepper down the rivers to the coaſt. Lib. vi. p. 23.

Κοράλιον. *Coral.*

Κοστος[41]. *Coſtus, Coſtum,*

Is conſidered as a ſpice and aromatick by Pliny, lib. xii. c. 12. It is called radix; *the root* pre-eminently, as nard, is ſtyled *the leaf.*

Coſtus

[41] It is worthy of remark that in the enumeration of gifts made by Seleucus Callinicus to the Mileſians, there ſhould be this diſtinction:

Frankincenſe	-	10 talents.	
Myrrh	- -	1 talent.	
Caſia	- -	2 pounds.	
Cinnamon	-	2 pounds.	
Coſtus	- -	1 pound.	

The

Coſtus being, as we may ſuppoſe, the beſt of aromatick *roots*, as nard or ſpikenard was the beſt of aromatick *plants*. This ſuppoſition explains a much diſputed paſſage of Pliny. Radix et Folium Indis eſt maximo pretio; the (root) coſtus, and the (plant) ſpikenard are of the higheſt value in India. Radix Coſti guſtu fervens, odore eximio, frutice alias inutili; the root of the coſtus is hot to the taſte, and of conſummate fragrance, but the plant itſelf, in other reſpects, without uſe or value. It is found at the head of the Pattalenè, where the Indus firſt divides to incloſe the Delta, of two ſorts, of which that which is black is the inferior ſort, and the white beſt. Its value is ſixteen denarii[42], about twelve ſhillings and eightpence a pound. Thus having diſcuſſed the coſtus or root, he proceeds to the leaf or plant. De folio nardi plura dici par eſt, but of this hereafter. It is here only mentioned to give the true meaning of the paſſage.

This root is ſaid by Salmaſius to grow in Arabia as well as India; and I do not find that it has acquired any European name, though it was formerly much uſed in medicine, and called the Arabian or true coſtus. It always contracts a bitterneſs, and grows black by keeping, which probably accounts for the white being more valuable (as Pliny ſays), becauſe it is freſh. Mr. Geoffroi, a French academician, mentioned under this article, in Chambers's Dictionary, conſiders it as the European elacampane root, which he aſſerts, when well fed and prepared, has the properties of the Indian aromatick.

Coſtus corticoſus bark, coſtus has a ſcent of cinnamon.

The reaſon is evident; frankincenſe and myrrh were procurable in Arabia, which bordered on his own kingdom. Caſia, cinnamon, and coſtus were Eaſt India commodities. See Chiſhull, Antiq. Aſiat. p. 71.

[42] The numbers in Pliny are dubious.

Λ

Λάδανον [43].

A gum or reſin from a plant called leda, lada, or ledum, a ſpecies of ciſtus. It is of a black colour, from Arabia; the Eaſt India ſort is very heavy, and like a grit-ſtone in appearance. Dr. Burgeſs informs me that it is adulterated with pitch from Pegu.

Λάκκος χρωμάτινος. Laccus. Coloured Lack.

Is a gum adhering to the ſmall branches of trees, ſuppoſed to be depoſited by an inſect.—When taken off and melted it is reddiſh, formed into granulated ſeed, lack for japanning; into ſhell-lack for ſealing-wax. Pomet. book viii. p. 200.

A dye of the red purple, (according to Ramuſio, pref. to the Periplûs, *lacco de tingere*) but Salmaſius, Plin. Exercit, p. 1160, ſays it is a cloth of this colour.

Λίντια. Linen, from the Latin lintea. See Ιματισμός.

Λίβανος. Frankincenſe [44].

Λίβανος ὁ περατικὸς. From the Coaſt of Adel.

A gum or reſin ſufficiently common in Europe ſtill; originally introduced from Arabia only, and uſed by the nations on the Medi-

[43] Herod. lib. iii. p. 253, where he ſays, it is collected from goats' beards, a moſt fragrant odorific gum. See Larcher, Herod. tom. iii. p. 350.

[44] Olibanus, oleum Libani.

terranean under the denomination of thus and libanus which are ſynonymous. Its name is derived from לבן, laban, white, Heb. and לובן, loban, Arabick, becauſe the pureſt ſort is white [45] without mixture. See Bochart, tom. i. p. 106. Hence libanus and the corrupt olibanum. M. Polo calls it *encens blanc*. Bergeron's Col. p. 153. It was chiefly brought from Hadramaut or Sagar, a tract of Arabia on the ocean. The beſt ſort is likewiſe in ſmall round grains called χόνδρος, from the Arabick כנדר, chonder. Bochart, ibid. But Niebuhr ſays, that the libanus of Arabia at preſent is greatly inferior to that brought from India, as being foul, mixed with ſand and ſtones; he adds alſo, that the plant which produces it, though cultivated at Keſchia and Schahr (Sagar) is not native, but originally from Abyſſinia. See Niebuhr. Arabia, tom. i. p. 202. ii. p. 131. in which opinion he is ſupported by Bruce. When he was in Arabia the Engliſh traders called the Arabian ſort incenſe of frankincenſe, and the Indian or better ſort, benzoin, and the worſt benzoin was eſteemed more than the beſt incenſe. The Arabs themſelves preferred the Indian to their own, and called it bachor Java, either becauſe it grew in that iſland, or was imported from Batavia. See alſo d'Anville, Geog. Anc. tom. ii. p. 223.

Λιθίας Ὑαλῆς πλείονα γένη καὶ ἄλλης Μυῤῥινῆς τῆς γενομένης ἐν Διοσπόλει. *Glaſs and Porcelane made at Dioſpolis.*

1ſt, Lithia Hyala. Several ſorts of glaſs, paſte, or chryſtal. See article Λιθία διαφανής.

2d, Λιθία Μυῤῥίνη.

[45] It grows yellow by keeping. Dr. Burgeſs has ſpecimens of Arabian libanus, but poſſibly Oriental.

Which

Which Salmaſius ſays, ought always to be written morrina, not myrrhina, myrrina, murrhina, or murrina. And he maintains that it is certainly the Oriental porcelane. It is here evidently joined as the adjective to Λιθία, as it is afterwards (p. 28. Peripl.) mentioned with Λιθία ονυχίνη, and connected in a ſimilar manner Λιθία ονυχίνη καὶ Μυρρίνη [46], where it is ſpecified as brought down from the capital of Guzerat, Ozene, (Ougein,) to the port of Barygaza or Baroach. All this ſeems to confirm the opinion that it was porcelane procurable in India at that time, as it now is; and that it was brought into Egypt by the ſhips that went to India. But what is more extraordinary is, that it was imitated in the manufactories of Dioſpolis in Egypt, juſt as our European porcelane is now formed upon the pattern of the Chineſe.

But in oppoſition to this, Geſner produces a variety of authorities from Io. Frid. Chriſtius, to prove that it is a foſſil and not factitious. The principal one is from Pliny, lib. xxxvii. c. 2. where it plainly appears that Pliny thought it a foſſil from Carmania, while his deſcription of it ſuits porcelane better than any ſubſtance which we know, as, variety of colours, purple, or rather blue and white ſpots, with a ſort of variegated reflection between both. Martial ſtyles it myrrhina picta, xiii. p. 110. and notices it as capable of containing hot liquors.

Si calidum potes ardenti murra Falerno
Convenit, et melior fit ſapor inde mero.

This *ſapor* and the *odor* mentioned by others are the only properties we cannot attribute to it in conformity with the language of the ancients. Martial notices likewiſe,

Maculoſæ pocula murræ.

[45] And thus Geſner cites; Heliogabalus .... myrrhinis et onychinis minxit. Lamprid. 32.

And when another citation is adduced

Murreaque in Parthis pocula cocta focis. PROPERTIUS. iv. 5. 26.

Chriſtius is forced to contend that *murrea* is not the ſame as *murrina*, but an imitation like the Dioſpolite manufacture.

That it came from Parthia[47] into Egypt, to the countries on the Mediterranean, and to Rome, ſeems evident from a variety of authorities, and that it might well do, if we conſider that Parthia communicated with India by means of the Perſian Gulph, and poſſibly on the north with China[48] itſelf, by means of the caravans. The mention of Carmania by Pliny, as the country where the murrhina were obtained, favours the ſuppoſition of procuring theſe veſſels from India; for the communication of Carmania with Scindi and Guzerat is almoſt immediate, and certainly prior to the navigation from Egypt to that coaſt. But in Guzerat they were obtained, when the author of the Periplûs was employed in that trade; and their arrival at the market of Baroach, from the interior of India, may induce us to ſuppoſe, that they came into India from the north.

The immenſe value of theſe veſſels at Rome might well ariſe from their ſcarcity. They were firſt ſeen there in the triumphal proceſſion of Pompey; and it muſt be obſerved that Pompey returned from the ſhores of the Caſpian Sea. They were afterwards introduced into uſe at the tables of the great, but of a ſmall ſize and capacity, as cups for drinking. Afterwards one which held three

[47] The kingdom, not the province, as we may ſee from a former citation noticing Carmania.

[48] That there was an intercourſe with the Seres on the north of the Himmalu mountains, and that exchange of commodities took place at ſome frontier, like that between the Ruſſians and Chineſe at Kiatcha is evident from Ptolemy, Pliny, and the Periplûs. Whether the Seres were Chineſe or an intermediate tribe between India and China is not material.

ſextarii

ſextarii or pints, was ſold for ſeventy talents; and at length Nero gave three hundred for a ſingle veſſel. The extravagance of the purchaſer might in this inſtance enhance the price, but the value of the article may be better eſtimated by the opinion of Auguſtus, who, upon the conqueſt of Egypt, ſelected out of all the ſpoils of Alexandria a ſingle murrhine cup for his own uſe. Now therefore if the murrhine was porcelane, it may be a piece of information acceptable to our fair countrywomen, to know that Cleopatra did not indeed ſip her tea, but drink her Mareotick wine out of china.

I have not been able to conſult the work of Chriſtius, but take the account of his argument from Geſner, and I refer the reader for further information to Geſner in voce, to Chambers's Dictionary, to Salmaſius, Plin. Exercit. and to an expreſs diſſertation in the Volumes of the Academy of Belles Lettres, which I have formerly ſeen, but have not now an opportunity of conſulting. I recollect that it is in favour of Salmaſius's opinion, that murrina and porcelane are the ſame.

Λιθία διαφανὴς.

A tranſparent ſubſtance of ſtone or pebble, but it is probably here the glaſs made of ſtone as clear and bright as chryſtal, and the ſame as Ὑαλὴ, Hyalè mentioned before. Salmaſius, p. 1096, has a very curious quotation from the Scholiaſt on Ariſtophanes ad Nubes, Act ii. ſcen. 1. "We call Hyalos (he ſays) a material made of a "certain plant burnt, and waſted by fire ſo as to enter into the "compoſition of certain [glaſs] veſſels. But the ancients appro- "priated the term hyalos to a tranſparent ſtone called kruon, or "chryſtal."—This perfectly accords with the manufacture of glaſs, compoſed of ſand, or flints, and the aſhes of a plant called kali or

vitraria

vitraria in Narbonne. Salm. ibid. and Chambers in voce. But glaſs has its name from glaſtum[49] or woad, *the blue dye*, becauſe common glaſs was of that colour, but the tranſparent ſtoney glaſs [flint glaſs] here mentioned ſeems to take its name [διαφανὴς] tranſparent, and [Ὑαλὴ] chryſtalline, from its ſuperior purity and imitation of the chryſtal. The whole paſſage in the Scholiaſt is intereſting, and worth conſulting. Nub. act. ii. ſcen. 1. l. 766. Τὴν Ὕαλον λέγεις.

" The hyalos or chryſtal is formed circular and thick for this " purpoſe [the purpoſe of a burning glaſs], which being rubbed " with oil and warmed, they bring near the wick of a lamp and " light it:" [it was rubbed with oil probably to clean it, but why warmed does not appear.] " Homer knew nothing of the " chryſtal, but mentions amber:" [true, for with Homer κρύσταλλος is always ice.]

Hence it appears that chryſtal was known to Ariſtophanes, and the application of it to the purpoſes of a burning glaſs; that glaſs was known in the time of the Scholiaſt, and that Homer knew nothing of either. The uſe of a pebble or chryſtal, however, to kindle fire is known at leaſt as early as the writings of Orpheus περὶ λίθων. And if the writings attributed to Orpheus be really the work of Pythagoras, or a Pythagorean, as Cicero ſuppoſes, De Nat. Deorum, the knowledge of this property is ſtill very old.

That clear or flint glaſs aſſumed its name from Ὑαλη, chryſtal, is ſtill more apparent from a paſſage of Diodor. Sic. lib. ii. p. 128. ed. Weſſel. where mention is made of both ſorts, the factitious and native

[49] See Voſſius ad Melam, Varior. ed. 1722, who cites Pliny, lib. xxii. c 1. Simile Plantagini Glaſtum in Gallia, quo Britannorum conjuges nuruſque toto corpore oblitæ. Voſſius adds, apud Cambro-Britannos iſatidis proventus Glas appellatur, et cæruleum colorem. Herba iſatis is Woad.

Γελον, as he writes it. The glaſs coffin of Alexander is called Γαλίνη, by Strabo, lib. xvii. p. 794. See Herod. iii. p. 206. et Weſſel. not. et Diod. ii. p. 15.

Λίθος καλλεανὸς καλλαϊνὸς.

Stone of Calleau, literally Goa ſtone, for Callien is a river that falls into the ſea near Goa, and retains its name to this day. Rennell, d'Anville. Not that this is the modern drug ſo called, but a blue ſtone[50], according to Salmaſius, p. 240, and an emerald in the eſtimation of Ramuſio, pref. to the Periplûs.

Λίθος ὀψιανὸς.

Probably ſerpentine or hæmatite marble, in the opinion of Dr. Burgeſs. Opſian or opſidian ſtone. But Salmaſius ridicules Pliny for calling it opſidian, or ſaying it was diſcovered by Opſidius. In Greek it is always opſian, and is a green ſtone very dark, approaching to black. It was found in the iſlands of Ethiopia; and from taking a high poliſh was uſed by the emperor Domitian to face a portico, ſo that from the reflection he might diſcover if any one was approaching from behind.

The opſidian ſtone, mentioned by Pliny, is factitious, and ſeems very much to reſemble the material of which our brown or red tea-pots are compoſed. Totum rubens, atque non tranſlucens, hæmaticum appellatum. See diſcourſe in the Memoirs of the Academy of Sciences. The ſpecimens of this ſtone, which I have ſeen, are ſo dark that the green caſt can only be diſcovered by holding them in a particular poſition. The cloſeneſs of their texture ſeems

[50] But he mentions it as a topaz, and ſays there are topazes of two different colours; if blue, why not a turquoiſe? which is ſtill a favourite ſtone in the caſt.

to

to admit of any degree of poliſh that the artiſt may be diſpoſed to give them.

Λύγδος. *Lygdus.*

A beautiful white marble, or rather alabaſter uſed to hold odours; Ramuſio. Salmaſius ſays, an imitation of this alabaſter[31] was formed of Parian marble, but that the beſt and original lygdus was brought from Arabia, as noticed in the Periplûs, from Mooſa. Salm. p. 559.

Λύκιον. *Lycium.*

A thorny plant, ſo called from being found in Lycia principally. A juice from which was uſed for dying yellow, mentioned by Pliny and Dioſcorides. The women alſo, who affected golden locks, uſed it to tinge their hair. Salm. p. 1164. Why this ſhould be ſought in Scindi, if it was found in Lycia, does not appear. It is found now in the ſhops by the name of the yellow-berry, box thorn, grana d'Avignon. Dr. Burgeſs.

Λωδικες. *Lodices.*

Quilts or coverlids.

ὲ πολλαὶ ἀπλοῖ κ᾽ ἐντόπιοι.

Coverlids plain and of the country manufacture at Mooſa.

[31] Unguenta optime ſervantur in alabaſtris. Plin. lib. xiii. p. 3.

Μαργαριται.

M

Μαργαρίται, p. 84.

Pearls, fiſhed for near Cape Comorin, where the fiſhery ſtill continues, or the Lackdive Iſlands, formed a great article of commerce on the coaſt of Malabar.

Μαλάβαθρον, p. 84. ***Malabathrum.***

A drug or aromatick as much diſputed as any Oriental name which occurs. But generally ſuppoſed to be the betel nut, written betre, and preſerving a relation to the two final ſyllables of the Greek. This nut is encloſed in the leaves of a plant called arecka, mixed with lime and ſometimes with odours, and uſed as a maſticatory, by almoſt all the Oriental nations, but more particularly in the Molucca iſlands, the Golden Cherſoneſe, and China; it turns the teeth black, and conſequently makes white teeth out of faſhion, as Prior ſays,

> King Kihu put ten queens to death,
> Convict on ſtatute, Ivory Teeth.

The compoſition, being from two plants, the beetle nut and the arecka leaf, has probably given riſe to the variety of deſcriptions and alluſions in different authors. But Horace, lib. ii. ode, 7, uſes it evidently as an aromatick unguent;

> —— nitentes,
> Malobathro Syrio capillos.

And Pliny, lib. xii. 26. xiii. 1. confirms the alluſion by making it an unguent from Syria, but ſays a better ſort comes from

Egypt, and ſuperior ſtill from India. This, therefore, cannot be the Oriental betel, though as an exquiſite odour it may, by ſome intermediate corruption, have uſurped a name, from the true βάθρον or betel. The price was prodigious, according to Pliny, the drug coſting three hundred denarii, ten pounds a pound, and the oil ſixty or ſeventy denarii. It was uſed, he adds, as an odour in wine lukewarm, and had the flavour of ſpikenard [52].

Whether the author of the Periplûs uſes malabathrum, as the unguent known to Pliny and the Romans by that name, cannot be determined, as he merely gives the name without explanation in his liſt. But that he had obtained an obſcure knowledge of the betre, and its form as rolled up in leaves, is proved in the manner of his uſing the term *petros*. This demands a ſeparate conſideration, and will be found at the concluſion of the Periplûs, explained in all its parts, as far as the learning of Salmaſius can guide us.

Μάκειρ. *Macer.*

An aromatick from India, the bark red, the root large. The bark uſed as a medicine in dyſenteries. Plin. xii. 8. Salm. 1302.

Μιάχαιραι.

Knives or canjars worn at the girdle.

[52] It appears by Pliny, lib. xiii. c. 2. that almoſt all the fragrant odours of the eaſt entered into the compoſition of their unguents. In the royal Perſian unguent no leſs than twenty-ſix odours are enumerated, and among them the malobathron, which is not ſo properly an odour as a ſtimulant, if it be the betre, but it is frequently confounded with the ſpikenard, the firſt of odours, which is pre-eminently called folium, or *the* leaf, in oppoſition to coſtus, or *the* root. But the betel-nut being wrapt in the arecka *leaf* has probably given riſe to the miſtake. See Pliny, lib. xii. c. 12. where the hadroſphærum, meſoſphærum, microſphærum, all diſtinctions of the betel, are falſely applied to the ſpikenard.

Μελίφθα

Μελιέφθα χαλκὰ.

Braſs [53] or copper, prepared, as Ramuſio ſays, for veſſels of cookery. But rather for ornaments of women, as bracelets, anklets, and collars. No uſage of Μελιέφθα occurs elſewhere; but metals were prepared with ſeveral materials to give them colour, or make them tractable or malleable. Thus χολόβαφα in Heſychius was braſs prepared with ox's gall to give it the colour of gold, and uſed like our tinſel ornaments or foil for ſtage dreſſes and decorations. Thus common braſs was neither ductile nor malleable, but the Cyprian braſs was both. And thus, perhaps, braſs, μελιέφθα, was formed with ſome preparation of honey.

Μέλι καλάμινον τὸ λεγόμενον σάκχαρι.

Honey from canes. *Sugar.*

In Arabick, ſhuker, which the Greeks ſeem firſt to have met with on the coaſt of Arabia, and thence to have adopted the Arabick name. It is here mentioned on the coaſt of Africa, where the Arabians likewiſe traded, and either imported it themſelves from India, or found it imported; it was evidently not found in that age growing in Africa. The Shanſkreet name of ſugar is ich-ſhu-caſa, and from the two middle ſyllables the Arabick ſhuka, or ſhuker. Aſ. Reſearch. iv. 231.

Μελίλωτον. *Honey Lotus.*

The lotus or nymphæa of Egypt. The ſtalk contains a ſweet and eatable ſubſtance, conſidered as a luxury by the Egyptians, and uſed

[53] This article is very dubious.

as bread; it was ſometimes carried to Rome, and the Periplûs makes it an article of importation at Barygaza. It appears alſo to have been uſed as proviſion for mariners; and if this was the favourite bread of Egypt, in preference to grain, Homer might well ſpeak of it as a luxury and delicacy; but his lotus is generally ſuppoſed to be the fruit of a tree, by our African travellers. Authors differ, ſome aſſerting that it is ſtill common in the Nile, others ſaying that the lotus now found there has neither pulp nor ſubſtance.

Μοκρότυ θυμίαμα.

An incenſe called mocrotus or mocroton.

Μολόχινα.

Coarſe cottons of the colour of the mallow. Others read Μοναχῆ, either ſingle threaded or of one colour.

Coarſe cotton dyed of a whitiſh purple, and therefore called molochina from Μολόχη, *mallows*. Wilford, Aſiat. Diſſertations, vol. ii. p. 233.

Μόλυβδος. *Lead.*

Μοτῶ.

A ſpecies of cinnamon. See Κασσία.

Μύρον.

Myrrh or oil of myrrh. Unguent in general, but pre-eminently of myrrh [54].

[54] The African is beſt, the Abyſſinian, Arabian, and Indian worſt. Dr. Burgeſs.

A gum

A gum or reſin iſſuing from a thorn in Arabia, Abyſſinia, &c. Bruce has given an account of the plant; he ſays it is originally from Africa, and that the Arabian myrrh is ſtill an inferior ſort. See Bruce, Chambers, and Salmaſius.

Μυῤῥινὴ. See Λιθία Μυῤῥινὴ.

Porcelane. See Geſner and Chambers in voce.

N

Νάρδος.

Nard or ſpikenard, p. 93. Νάρδος Γαπανικὴ. Others read Γαγγιτικὴ, nard of Gapanick . . . . . or of the Ganges.

No Oriental aromatick has cauſed greater diſputes among the criticks, or writers on Natural Hiſtory, and it is only within theſe few years that we have arrived at the true knowledge of this curious odour, by means of the inquiries of Sir William Jones and Dr. Roxburgh.

Their account is contained in the ivth volume of the Aſiatick Reſearches, and Dr. Roxburgh was ſo fortunate at laſt as to find the plant in a ſtate of perfection, of which he has given a drawing that puts an end to all controverſy on the ſubject.

The nard has the addition of ſpike from the Latin ſpica, an ear of wheat, which, according to Dr. Roxburgh's drawing, it perfectly reſembles. And this adjunct is found alſo in its Arabick name, ſumbul. And in its Shanſkreet appellation, jatámánsí; as alſo its Perſick title khúſtah, all ſignifying *ſpica*.

Sir

Sir William Jones, Aſiat. Reſ. iv. 117, ſays it is a native of Budtan, Népal, and Morang; and that it is a ſpecies of Valerian. It is remarkable that he had himſelf ſeen a reſemblance of it in Syria, as the Romans or Greeks mention Syria as one of the countries where it is found; but Ptolemy gives it its true origin in theſe tracts of India. A ſpecimen was brought down to Calcutta from Boudtan at the requeſt of Sir William Jones, and the agents of the Deva Raja called it pampi; but it was not in flower. Some dried ſpecimens of it looked like the tails of ermines, but the living ones, as Dr. Roxburgh afterwards found, riſe from the ground like ears of wheat. It anſwers the deſcription of Dioſcorides. It is weaker in ſcent than the Sumbul ſpikenard of Lower Aſia, when dry, and even loſt much of its odour between Budtan and Calcutta. The odour is like the ſcent of violets; but the living plant is forbidden to be brought out of Boudtan. It was, however, procured by the intervention of Mr. Purling the Engliſh reſident; and was at laſt received in its perfect form by Dr. Roxburgh, who has deſcribed it botanically. Aſ. Reſ. iv. 733.

In the age of the Periplûs it was brought from Scindi, and from the Ganges; which, according to Sir William Jones, we ought to conclude would be the natural port for it, as coming from Boudtan. This authorizes the change of reading from γαπανικὴ, [gapanika,] to γαγγιτικὴ, [gangitikà], more eſpecially as it is mentioned at the Ganges. Some fanciful inquirers might think they had found the mention of Japan in this paſſage.

We ought not to omit ſome particulars from Pliny which are remarkable. He deſcribes the nard with its ſpica, mentioning alſo that both the leaves and the ſpica are of high value, and that the odour

odour is the prime in all unguents. The price an hundred denarii for a pound. And he afterwards viſibly confounds it with the malobathrum or betel, as will appear hereafter, from his uſage of hadroſphærum, meſoſphærum, microſphærum, terms peculiar to the betel. The characteriſtick name of the nard is folium [55], *the* leaf pre-eminently, in contradiſtinction to coſtus *the* root, both as the prime odours of their two ſorts, the root and the leaf.

But there is ſtill a more remarkable particular in Pliny, which is, that he evidently copies the Periplûs in the three places he allots for the markets of the ſpikenard; for he mentions Patala at the head of the Delta [56] of the Indus, correſpondent to the Barbarika of the Periplûs, and another ſort which he calls Ozænítides, evidently agreeing with the mart of Ozéne (p. 75. Peripl.); and a third ſort named gangitick, from the Ganges, anſwering to gapanick, for which all the commentators agree in reading gangitick. Very ſtrong proofs theſe that Pliny had ſeen this journal and copied from it, as he mentions nothing of Ozéne in his account of the voyage, and only catches Ozænítides here incidentally. See Salmaſius, p. 1059, et ſeq. who is very copious on the ſubject, and has exhauſted all that the ancients knew of this aromatick [57].

Ναύπλιος, p. 27. *Nauplius.*

It ſeems to be an inferior tortoiſe-ſhell from the context, which runs, ϗ χελώνη διάφορος μετὰ τὴν Ἰνδικὴν ϗ ναύπλιος ὀλίγος, i. e. tortoiſe-ſhell of ſuperior kind, but not equal to the Indian; and a

[55] Salmaſius, p. 1065, is clearly of opinion, that Pliny is regularly miſtaken in applying folium to nard. He ſays it is always peculiar to malobathrum betel.

[56] Whether this in Pliny does not apply to coſtus?

[57] It reſembles the tail of a ſmall animal, in Dr. Burgeſs's Collection.

ſmall

ſmall quantity of that ſpecies called nauplius. It may, however, be a different commodity, but I cannot trace it in Salmaſius or Pliny, unleſs it be the ſhell of that fiſh he calls nauplius, lib. ix. c. 30. which ſeems a ſpecies of the nautilus.

Νῆμα Σηρικὸν καὶ Ἰνδικὸν μέλαν.

Black ſewing ſilk both Chineſe and Indian. If this paſſage could be aſcertained as rightly rendered, it would prove that the ſilk manufacture was introduced into India as early as the age of the Periplûs. Νῆμα can hardly be applied to a web, it ſeems always to be thread, and here ſewing ſilk. If indicon is the adjunct of nema there is no difficulty, but indicon melan may be indigo in the opinion of Salmaſius.

O

Ὀθόνιον. *Muſlin.*

1ſt ſort. Ἰνδικὸν τὸ πλατύτερον ἡ λεγομένη Μοναχὴ.

Wide Indian muſlins called monakhè.

2d ſort. Σαγματογήνη. Σαγματογίναι. Salm. reads Σαματοπήνη, from πηνίον, a thread. Salm. p. 1170.

Salmaſius ſeems to interpret theſe two ſorts as muſlins made up in *ſingle* pieces, or many in a parcel; he is not ſatisfied, however, with his own interpretation; but it is to be obſerved, that the fineſt muſlins ſtill come to Europe made up in ſingle pieces, called *book* muſlins from their form. And it is by no means irrational to conceive that a cuſtom of this ſort is coeval with the trade.

Monakhè, ſingle.

Sagmato-ginè, made up in parcels.

Sagmato-penè, made of a bulky thread, or ſo thick as to ſerve for coverlids. Salm. ibid.

3d. ſort. Χυδαῖον.

Coarſe muſlins, or rather coarſe cottons, called at preſent dungarees; Wilford, Aſ. Diſſert. vol. ii. p. 233. to which monakhè is oppoſed as a finer ſort.

Οἶνος. *Wine.*

1. Λαοδικηνὸς. Wine of Laodicæa, but which city of that name does not appear. There is a Laodicæa in Egypt.

2. Ιταλικὸς. Italian wine.

3. Αραβικὸς. Arabian wine. It is dubious whether palm wine or toddy wine, it ſeems to have been a great article of commerce.

Ὄμφαξ Διοσπολιτικὴ. *Unripe grapes of Dioſpolis.*

In what form this was an article of commerce does not appear, it is mentioned but once. Unripe grapes, however, are imported into England both from Liſbon and Madeira.

Ὀπήτια, p. 27. *Awls or bodkins.*

An article in trade on the coaſt of Africa, as needles are at this day.

Ὀρείχαλκος. *Mountain braſs.*

Uſed for ornaments. Ramuſio calls it white copper, copper from which the gold and ſilver has not been well ſeparated in extracting it from the ore.

Π

Παρθένοι εὐειδεῖς.

Handſome women ſlaves for the haram are mentioned as intended for preſents to be ſent up to the king of Guzerat, whoſe capital was Ozénè or Ougein.

Πελύκια.

Small hatchets or axes for the African trade.

Πέπερι, *Pepper.*

Imported from the coaſt of Malabar, as it ſtill is; the native term on the coaſt is pimpilim; Salm. p. 1070. or the Shanſkreet, pipali. Aſ. Reſ. vol. iv. p. 234. The pepper coaſt is called in Arabick beled-el-fulful. D'Anville, Ind. p. 118.

It was found by the Greeks from Egypt firſt in Ethiopia, as an article of commerce brought thither by the Arabs, but was known in Greece much earlier.

Two ſorts are diſtinguiſhed in the Periplûs.

1. Κοττοναρικὸν.

From Cottonara, the kingdom of Canara, according to Rennell, which is ſtill the principal mart for pepper, or at leaſt was ſo before

the Engliſh ſettled in Sumatra. This is the black pepper. See Marſden's Sumatra.

2. *Μακρὸν.*

Long pepper[58], ſo called from its form being cylindrical, an inch and an half long. It conſiſts of an aſſemblage of grains or ſeeds joined cloſe together. It reſembles the black pepper, but is more pungent. It is a ſpecies of the Eaſt India pepper totally diſtinct from the Cayenne.

Περιζώματα.

Girdles or ſaſhes, and perhaps diſtinguiſhed from the following article,

Πηχυιᾶι αἱ ζῶναι.

Saſhes of an ell long, only in the difference of make or ornament.

Πιννικὸν.

Pearls or the pearl oyſter. See the fiſhery at Cape Comorin.

Πορφύρα διαφόρα καὶ χυδάια, p. 35.

Purple cloth of two ſorts, fine and ordinary. An article of trade at Mooſa in Arabia.

Ποτήρια, *Drinking veſſels*,

Χαλκᾶ, *Braſs*,

Στρογγύλα, *Round*,

Μεγάλα, *Large*.

[58] Tabaxir is the common long pepper.

Probably all three epithets apply to the ſame veſſel. An article of import on the coaſt of Africa.

Πυρὸς ὀλίγος.

Wheat in ſmall quantities, imported into Omana, or Oman in Arabia.

P

Ῥινόκερως. *Rhinoceros.*

The horn or the teeth, and poſſibly the ſkin, imported from the coaſt of Abyſſinia, where Bruce found the hunting of this animal ſtill a trade, which he has deſcribed in all of its branches, vol. iv.

Σ

Σάγγαρα.

Canoes uſed on the coaſt of Cochin for conveying the native commodities from the interior to the ports, and ſometimes along the coaſt.

Σάγοι Αρσινοητικοῖ γεγναμμένοι καὶ βεβαμμένοι, p. 14.

Rugs or cloaks made at Arſinoe (Suez), dyed, and with a full knap.

Σανδαράκη.

Red pigment, Salm. p. 1155. found in gold and ſilver mines. Pliny. Ore of Cinnabar. Dr. Burgeſs.

Σαπφειρος.

Σάπφειρος. *Sapphire ſtone.*

The ancients diſtinguiſhed two ſorts of dark blue or purple, one of which was ſpotted [59] with gold. Salmaſ. p. 130, et ſeq. Pliny ſays, it is never pellucid, which ſeems to make it a different ſtone from what is now called ſapphire.

Σηρικὰ δέρματα. *Chineſe hides or furs.*

What is meant by δέρματα no where appears, unleſs it can be applied to the τάρποναι, whence the malobathrum was procured. But this is very dubious. See Μαλόβαθρον.

Σίδηρος. *Iron.*

An import into Abyſſinia for the manufacture of ſpear heads, to hunt the elephant, rhinoceros, &c [60].

Ἰνδικὸς.

Iron tempered in India.

Σινδόνες.

Fine linen of any ſort, but that imported into Abyſſinia might be Egyptian, and poſſibly of cotton, but

Σινδόνες αἱ διαφοράταται Γαγγιτικαὶ,

Can be nothing elſe but the fineſt Bengal muſlins.

Σῖτος. *Wheat corn.*

[59] Dr. Burgeſs has ſpecimens of both ſorts, the one with gold ſpots like lapis lazuli, and not tranſparent.

[60] To cut like an Indian ſword, is a common Arabick proverb in Arabſha. And in Egypt, Shaw (p. 364.) ſays, the hardeſt tools (as drills for working the granite Obeliſks) were made of Indian iron. Shaw quotes the Periplûs, but not perhaps juſtly.

Σκέπαρνα.

Σκέπαρνα. *Adzes.*

In contradiſtinction to πελύκια, hatchets.

Σκεύη αργυρᾶ. *Silver plate.*

Ὑαλᾶ.

Veſſels of chryſtal, or glaſs in imitation of chryſtal.

Σμύρνα. *Myrrh,*

Διαφέρουσα τῆς ἄλλης,

Of a ſuperior ſort,

Ἐκλεκτὴ,

Of the beſt ſort,

Στακτὴ. *Gum.*

Ασειρμινάια, read Σμυρνάια, by Bochart, Geog. Sac. ii. 22. Salm. 520. Extract or diſtillation from myrrh, of the fineſt ſort. The reading is proved by Salmaſius from a ſimilar error in an inedited epigram.

Στῆμι. Στίμμι.

Stibium for tinging the eyelids black.

Στολαὶ Ἀρσινοητικαὶ.

Women's robes manufactured at Arsínoè or Suez.

Στύραξ.

Στύραξ. *Storax.*

One of the moſt agreeable of the odoriferous reſins. There are two ſorts, ſtorax in the tear, ſuppoſed to anſwer to the ancient ſtyrax calamita, from its being brought in a hollow reed, or its diſtillation from it; and common ſtorax, anſwering to the ſtacte ſtyrax[61] of the ancients. It now grows in the neighbourhood of Rome; but the drug was anciently brought thither from the iſlands in the Archipelago. See Salm. p. 1026. Chambers in voce. Moſt of theſe gums, reſins, and balſams have in modern practice yielded to the American, as this ſeems to have given way to the balſam of Tolu.

Σῶματα, p. 15.

Slaves from Africa, an ancient trade! but the number was not great.

Υ

Ὑάκινθος.

The hyacinth or jacinth, a gem of a violet colour. But Salmaſius ſays it is the ruby, p. 1107. See Solinus, c. xxx. p. 57. where it ſeems to be the amethyſt.

Χ

Χαλκὸς. *Braſs or copper.*

[61] Strabo mentions ſtyrax in Piſidia; a diſtillation from a tree, cauſed by a worm breeding in it. Lib. xii. p. 570.

Χαλκουργήματα.

Χαλκεργήματα.

Veſſels of braſs, or any ſort of brazier's work.

Χελώνη.

Tortoiſe-ſhell ſeems to have formed a great article of commerce, for ornaments of furniture, as beds, tables, doors, &c. both in Italy, Greece, and Egypt. It was brought from the coaſts of Africa, near Moondus; Socotra, Gadroſia, Malabar, and the Lackdive, or Maldive iſlands; the former ſeem to be deſigned by χρυσιονῆσοι of the Periplûs.

Χιτῶνες.

Under garments, imported from Egypt into Africa.

Χρῆμα. *Specie.*

The Periplûs is very accurate in noting the ports where it was neceſſary to trade with ſpecie; and in more inſtances than one, notes the advantage of exchange.

Χρυσόλιθος. *Chryſolite.*

Sometimes the ſame as chryſites, the touchſtone for gold, Salm. p. 1103; but deſcribed as a ſtone as it were ſprinkled with ſpots of gold, Salmaſius, p. 407. who points out what it is not, but cannot determine what it is. It may well be the topaz [62].

Χρυσῦν,

Uſed with δηνάριον, as is ἀργυρῦν alſo, expreſſing gold and ſilver denarii.

Χρυσώματα, *Gold plate.*

62 The Bohemian is yellow with a greeniſh nut, the Oriental is very pale yellow. Dr. Burgeſs's Oriental topaz deep yellow.

No. II.

An ACCOUNT *of the* ADULITICK INSCRIPTION *collected from* CHISHULL, MONTFAUCON, MELCHISEDECK THEVENOT, *and other* AUTHORS.

THE Adulitick Inſcription is in itſelf one of the moſt curious monuments of antiquity, but the preſervation of it, and the knowledge which we have of it at this day, are ſtill more extraordinary than the inſcription itſelf. Coſmas (ſtyled Indicopleuſtes, from the ſuppoſition that he had navigated the Indian Ocean, which in truth he had not,) copied a Greek inſcription at Adûlè, which has ſince appeared to relate to Ptolemy Euergetes, and to prove that he had nearly conquered the whole empire of the Seleucidæ in Aſia, and the kingdom of Abyſſinia in Africa: two hiſtorical facts of conſiderable importance; notwithſtanding, his ſucceſs in Aſia was ſcarcely diſcovered in hiſtory [a], till this monument prompted the inquiry, and the conqueſt of Abyſſinia ſtill reſts upon this evidence alone.

The veracity of Coſmas, in his report of this inſcription, is eſtabliſhed upon proofs which have nearly united all ſuffrages in its favour; ſome obſcurity there ſtill remains, and ſome few objections naturally ariſe, to which Chiſhull has given a ſufficient anſwer. But there is one obſervation of his that is irrefragable, when he

[a] It does not now appear in any hiſtory to the extent that the marble aſſumes, or in any one author that I can diſcover, except a ſingle ſentence cited out of Polyænus by Bayer. See infra.

ſays that Coſmas himſelf did not know [2] to which of the Ptolemies it belonged, and conſequently he could not be the forger of particulars which accorded with one, and one only of the whole Dynaſty.

The work of Coſmas is ſtyled Topographia Chriſtiana, and is intended to prove that the earth is a plane, in oppoſition to the philoſophical notion of its being a ſphere, which the author conceived to be an heretical opinion, contrary to the revelation of the ſcriptures. He had himſelf travelled much, and in the parts he viſited, he ſtill found they were all on a plane, as well as Greece; in conſequence of this notion, his deductions are rather extraordinary; but the facts he relates, and the countries he deſcribes, are given with all the marks of veracity that ſimplicity can afford.

There *were* [3] two copies of his work, one in the Vatican, ſuppoſed to be of the ninth century, and another at Florence in the Library of Lorenzo [4], attributed to the tenth. In 1632, Leo Allatius publiſhed the Adulitick Inſcription from the copy in the Vatican [5]; and this was republiſhed by Berkelius in 1672, and again by Spon in 1685, both from the extract of Allatius. The ſame inſcription was again publiſhed by Melchizedeck Thevenot, in his Collection of Voyages, from the Florentine copy, extracted by Bigot. And finally the whole Topographia Chriſtiana was edited by the indefatigable B. Montfaucon [6] in 1706. Spanheim, Voſſius, and Vaillant, all bear teſtimony to the authenticity of the inſcription,

[2] He certainly likewiſe did not know the geography he details, and therefore he could not forge it. See Leukè Komè, a place on the Arabian ſide of the gulph, which he confounds with Leukogea on the Ethiopick ſide, in his own remarks on the marble.

[3] *Were*, we ſay, becauſe after the irruption of the Vandals of 1798, who can ſay they *are?*

[4] See the account of this library in Roſcoe's Life of Lorenzo.

[5] Chiſhull.

[6] The publication is ſtyled Nova Collectio Patrum, in two vols. folio, Paris 1706,

and

[illegible] Mandeil did not know Latin" to which of the Ptolemies [illegible] be forged, and consequently he could not be the forger of particulars which [illegible] only of the whole Dynasty.

The work of Cosmas is [illegible] Topographia Christiana, and is intended to prove that the earth is a plane, in oppofition to the philofophical notion of it being a fphere, which the author conceived to be an heathenifh opinion, contrary to the revelation of the fcripture. He had himfelf travelled much, and in the parts he vifited, he ftill found they were all on a plane, as well as Greece; in confequence of this notion, his deductions are rather extraordinary; but the facts he relates, and the countries he defcribes, are given with all the marks of veracity that fimplicity can afford.

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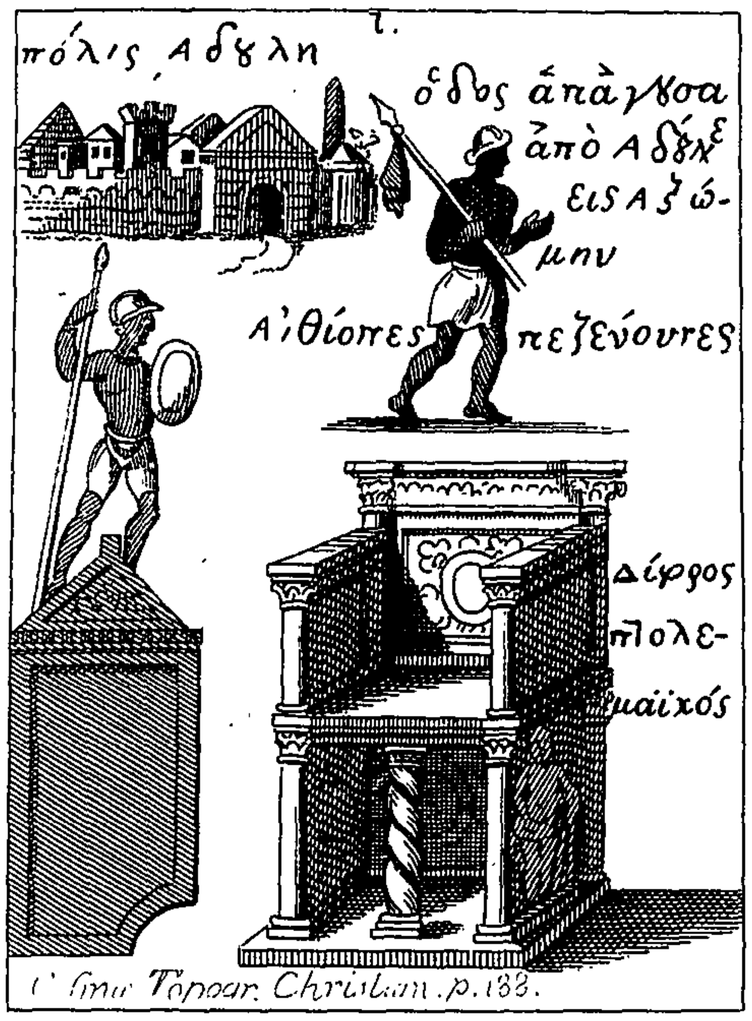
[1] It is certainly ill-bred to doubt what we do not know. Who of the Vandals of 1796, who can fay that geography be dough[illegible] and the fame be [illegible] could *more* forge it. [illegible] plane. [illegible]

[2] See the account of this library in Roscoe's Life of Lorenzo.

[3] Obfervations.

[4] The publication is entitled Nova Collectio Patrum, in two vols. folio, Paris 1706.

and



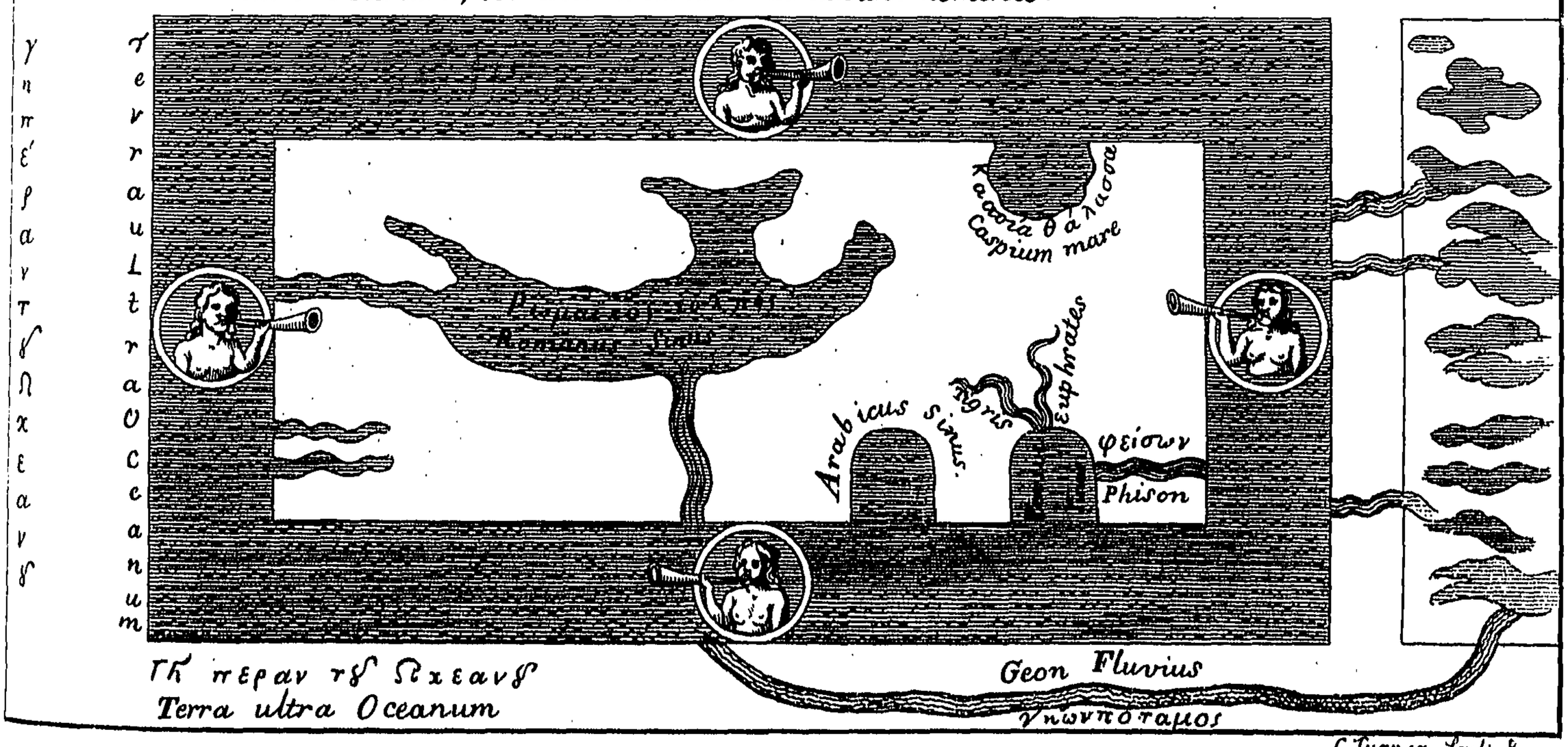
Cosmo Topogr. Christian. p. 138.

ΘΕΩΝ ΣΩΤΗΡΩΝ



Vaillant Hist. Ptol. p. 52.

Γῆ περαν τ῀ Ὠκεαν῀ ἐν᾽θα πρὸ τ῀ κατακλυσμ῀ κατῴκοων οἱ ἄνθρωποι
Terra ultra Oceanum, vbi ante diluvium habitabant homines.



C. Turner Sculp.t

London Published May 1st 1800 by the Revd Dr Vincent, Deans Yard Westminster.

and the internal evidence is ſuch as hardly to leave a doubt upon an unprejudiced mind. Let us now hear Coſmas ſpeak for himſelf.

Extract from the Topographia Chriſtiana' of Coſmas, written A. D. 545, p. 140. ed. Montfaucon.

Adûlè is a city of Ethiopia, and the port of communication with Axiômis [8], and the whole nation, of which that city is the capital; in this port we carry on our trade from Alexandria and the Elanitick Gulph [9]; the town itſelf is about two miles from the ſhore, and as you enter [10] it on the weſtern ſide, by the road that leads from Axiômis, there is ſtill remaining a chair or throne which appertained to one of the Ptolemies, who had ſubjected this country to his authority. This chair is of beautiful white marble [11], not [ſo white indeed as the] Pro-conneſian [12], but ſuch as we employ for marble ing, in which both pyramids and obeliſks appear; mean as the execution is, theſe are a certain proof that the manners and cuſtoms of Abyſſinia in that age were Ethiopick and Egyptian. Bruce found the ſame at Axûma, and if he could have ſtopped at Meroè to examine the ruins he there paſſed, aſſuredly they would have been Egyptian alſo or Ethiopick. He ſaw no remains of ruins from Axûma to Meroè.

[8] After the peace made with Seleucus for ten years, and renewed afterwards for ten years more, ſcarce a word occurs in hiſtory concerning Ptol. Euergetes, till this account on the marble was diſcovered by Coſmas more than 700 years after the invaſion of Ethiopia by this monarch. CHISHULL.

[8] Written in different authors Axuma, Axoma, Axioma, and Axiomis.

[9] The trade of Solomon and Hiram was carried on from Ezion Geber, at the head of the Elanitick Gulph. And in all ages, I imagine Ela, Aila, or Ailath, to have been the mart to which the Phenicians of Tyre reſorted, or to Phenicon, which perhaps took its name from them. Ela and Phenicon may at different times have been in the poſſeſſion of Nabátheans, Petreans, Egyptians, Tyrians, Hebrews, or Romans.

[10] See the view of Adûlè in Coſmas's draw-

[11] Δοκιμαστὸν, valuable, coſtly.

[12] The iſland of Proconnêſus in the Propontis naturally ſupplied Conſtantinople with marble, with which it ſo much abounded, as to change its name to Mármora, and to give that title to the Propontis, now called the Sea of Mármora. A monk of Conſtantinople of courſe referred to the marble with which he was moſt acquainted. The church of Santa Sophia is built with Proconneſian marble.

tables; it ſtands on a quadrangular baſe, and reſts at the four corners on four ſlender and elegant pillars[13], with a fifth in the centre, which is channeled in a ſpiral form. On theſe pillars the ſeat is ſupported, as well as the back of the throne, and the two ſides on the right and left.

The whole chair with its baſe, the five pillars, the ſeat, the back, and the two ſides, is of one entire piece, carved into this form; in height about two cubits and a half, and in ſhape like a biſhop's throne[14].

At the back of the chair is a tablet of baſanite [or touch] ſtone[15], three cubits in height, the face[16] of which is an [oblong] ſquare, while the whole maſs is in the form of a lambda, riſing to a point at the top, and ſpreading at the bottom, Λ. But the front[17] is quadrangular. This tablet is now fallen behind the chair, and the lower part of it is broken and deſtroyed, but the whole of this [ſtone or] marble and the chair itſelf is [in a manner covered over and] filled with Greek characters.

[13] Λεπτὰ κιόνια.

[14] Cathedra.

[15] Baſanites is ſuppoſed to be an Egyptian marble or granite, and the name alſo to be Egyptian, and not Greek from βάσανος, as it is uſually eſteemed. See Chambers's Dictionary, art. touchſtone. The Greek term βάσανος, might poſſibly be derived from Egypt, the country where the touchſtone was procured. But it is perfectly Greek in its uſage and derivation.

[16] Τετράγωνον ὡς; ἰκών. I render this literally, but not correctly. Chiſhull writes, ad modum tabulæ pictoriæ, but how ἰκών has that ſenſe I cannot determine. I ſuppoſe this baſanite ſtone or marble to be in the form of a wedge, ſquare [an oblong ſquare] on the broad face, and like a Λ on the ſides, the broad ſuperficies is ſo repreſented in the drawing of Coſmas, an oblong ſquare broken at the corner, the channelling of this tablet is repreſented as carried round the broken corner, whether this is the error of Coſmas or the engraver muſt be determined by the MSS.

[17] Σῶμα, body, the whole body or maſs of a marble in the form of a lambda cannot be a ſquare, but a wedge; it is one of the faces of this wedge which muſt be meant, and even this would not be a ſquare, but quadrangular (τετράγωνον), as repreſented in the drawing of Coſmas, that is a parallelogram.

Now

Now it ſo happened that when I was in this part of the country, about five and twenty years ago[18], more or leſs, in the beginning of the reign of Juſtin the Roman emperor, that Eleſbaan[19] the king of Axiomites, when he was preparing for an expedition againſt the Homerites[20] [in Arabia] on the other ſide of the Red Sea, wrote to the governor of Adûlè, directing him to take a copy of the inſcrip-

[18] The reign of Juſtin commences in 518. The expedition of Eleſbaas is uſually placed in 525, the eighth year of Juſtin, but the marble might have been copied a year or two years before the expedition.

[19] It is a moſt remarkable circumſtance, that in a hiſtory ſo obſcure and wild as that of Abyſſinia, any fact ſhould be eſtabliſhed upon ſuch clear and ſatisfactory grounds, as this of the reign of Eleſbaas and his expedition into Arabia. But the authorities adduced by Baronius, Montfaucon, Ludolfus, Chiſhull, and Bruce are ſo expreſs, that there cannot remain a doubt; and if that reign is eſtabliſhed, the veracity of Coſmas needs no other ſupport. Now it appears from the evidence they have adduced, that the ſovereigns of Abyſſinia, in the reign of Juſtin, about the year 525, had extended their power into the country of the Homerites, which is a diſtrict of Sabêa, where they had a governor reſiding; it appears alſo that ſome Abyſſinians had been put to death by Dunaanas, one of the native chiefs in Arabia, and a Jew, who are ſtill conſidered as martyrs to their faith, and that Eleſbaas undertook an expedition into Arabia, in which he was ſucceſsful, and puniſhed the aſſaſſin of his ſubjects. His Abyſſinian title was Caleb el Atſeba, or Caleb the *Bleſſed*; whence the Greek corruption of Eleſbas, Eleſbaas, and Eleſbaan (Bruce, vol. i. p. 503. Ludolf, p. 165. Hiſt. of Ethiopia). Bruce aſſures us, that this hiſtory is confirmed by the Chronicle of Axûma, and Montfaucon cites Nónnoſus in Photius, whoſe teſtimony corroborates the chronicle in the ampleſt manner, (Montfaucon Nova Collectio Patrum, tom. ii. p 140.) for Nónnoſus ſpeaks of himſelf as embaſſador from Juſtin to Kaiſus, an Arab prince of the Khíndini and Maadêni, and to Eleſbáas king of Axûma, agreeing ſo much both in time and name with the Eleſbáas of Coſmas, that it induces a conjecture that Coſmas was a monk in the ſuite of the embaſſador (ſee Photius, p. 6. ed. Geneva, 1612, with the citation of Nicephorus in the margin). But without taking this into the conſideration, it is a natural conſequence, if Eleſbáas is proved to be the king of Axûma in that age, that the account of Coſmas is worthy of credit. Bruce adds, that Mahomet in the Koran mentions Dunaanas, not by name, but as maſter of the *fiery pits*, alluding to the martyrs who were burnt (vol. i. p. 516.). Other authors cited by Montfaucon are Metaphraſtus, Calliſtus, Abúlpharage.

[20] Coſmas himſelf, in another part, deſcribes the country of the Homerites as lying on the coaſt of Aden beyond the ſtraits; but as they occupy the angle of the continent, their territory may extend both within and without the ſtraits. See Ptolemy, Aſia, tab. vi.

tion,

tion[21], which was both on the chair of Ptolemy, and on the tablet, and to ſend it to him [at Axiômis].

The governour, whoſe name was Aſbas[22], applied to me and to a merchant of the name of Menas, to copy the inſcription; Menas was [a Greek of my acquaintance, who afterwards became] a monk at Raithû, and died there not long ago. We [undertook the buſineſs together, and having completed it,] delivered one copy to to the governour, and kept another for ourſelves. It is from this copy that I now ſtate the particulars of the inſcription, and I ought to add, that in putting them together [and drawing my own concluſions from them,] I have found them very uſeful for forming a judgment of the country, the inhabitants, and the diſtances of the reſpective places. I ought to mention alſo that we found the figures of Hercules and Mercury among the carvings, at the back of the ſeat[23]. - - - - - - - - - -

- - - - - - - - - - - - -

This is the form of the ſeat[24] and the marble. And Ptolemy himſelf [ſeems to ſpeak in the words of the inſcription].

(Here

[21] It is highly probable, that Eleſbaan underſtood the language, as he was a chriſtian, and of the church of Alexandria. His intercourſe alſo with the Greek emperor at Conſtantinople ſtrengthens this ſuppoſition. And in the earlier age of the Periplûs we find Zôſkales maſter of that language.

[22] Aſbas and El-Aſbas muſt be the ſame name, and there is nothing extraordinary in ſuppoſing that both the king and the governour might both aſſume the title, atſeba, *the bleſſed, the ſaint.*

[23] I have here omitted a conjecture of the monk foreign to the ſubject.

[24] Coſmas ſays, that malefactors were executed before this chair in his time; but whether it was a cuſtom continued from the time of Ptolemy he could not ſay. Bruce mentions a ſtone at Axûma exiſting ſtill, on which the kings of Abyſſinia were enthroned and crowned, and which likewiſe had an inſcription with the name of Ptolemy Euergetes. Had either of theſe facts any concern with a tradition or cuſtom derived from Ptolemy? See Bruce, vol.

(Here was inſerted a drawing by Coſmas himſelf repreſented in the oppoſite plate, and copied from the MS. by Montfaucon.)

Inſcription upon the figure or ſquare table in the form of a Λ.

Ptolemy the Great, king, ſon[25] of Ptolemy, king, and Arſinoe, queen, gods[26], brother and ſiſter[27]; grandſon of the two ſovereigns Ptolemy, king, and Berenícè, queen, gods preſervers[28]; deſcended

vol. iii. p. 132. It is extraordinary that the marble does not mention Axûma; and more ſo, if upon the credit of Bruce we conclude, that Ptolemy viſited Axûma in perſon. That indeed does not quite follow from the ſtone being found there with his name. But one inference we may make in Coſmas's favour, he knew Axûma, he knew it was the capital of the country; if he had forged the inſcription, Axûma would doubtleſs have been admitted.

[25] This genealogy at the commencement does not quite agree with another at the concluſion, where the king ſays, that Mars was the father *who begat him* (ὃς μὲ καὶ ἐγέννησε,). But as theſe Macedonian ſovereigns imitated Alexander in his vanity, if they would have gods for their anceſtors, it is not to be thought ſtrange, that their genealogy ſhould fluctuate. I think the inconſiſtence due to the vanity of the king, and that it ought not to be attributed to the miſtake of Coſmas, or to his lapſe of memory.

[26] In the character of ΘΕΩΝ ΑΔΕΛΦΩΝ, *gods, brother and ſiſter*, and ΘΕΩΝ ΣΩΤΗΡΩΝ, *gods preſervers*, we have one of the moſt illuſtrious proofs of the authenticity of the inſcription.

Beger had objected that on the coins of Ptolemy Sôter and Berenícè, ΘΕΩΝ only was found; and on thoſe of Philadelphus and Arſinoè, ΑΔΕΛΦΩΝ only. But ſoon after the objection was ſtarted, two gold coins were brought to light with the united heads of Ptolemy Sôter and Berenícè, of Philadelphus and Arſinoè. The former had no inſcription, but the latter diſplayed the ΘΕΩΝ ΑΔΕΛΦΩΝ, exactly correſponding with the Adulitick marble. Vaillant, Hiſt. Ptol. Regum, p. 52. ΣΩΤΗΡΩΝ was not found, but an equivalent is cited from Theocritus Idyl. 17.

Μητρὶ φίλᾳ καὶ πατρὶ θυώδεας ἔισατο πηύς.
Ἐν δ' αὐτοὺς χρυσῷ περικαλλέας ἠδ' ἐλέφαντι
Ἵδρυσιν, πάντεσσιν ἐπιχθονίοισιν ΑΡΩΓΟΥΣ.

In which they are evidently conſecrated as deities with the title of ΑΡΩΓΟΥΣ. Chiſhull.

A ſecond objection of Beger's was, that Philadelphus had no children by Arſinoè his wife and ſiſter. But the Scholiaſt on Theocritus Idyl. 17. fortunately furniſhed an anſwer to this alſo, who ſays that Ptolemy Philadelphus was firſt married to Arſinoè, daughter of Lyſimachus, by whom he had Ptolemy, (afterwards called Euergetes,) Lyſimachus and Berenícè. But that having diſcovered this Arſinoè engaged in ſome conſpiracy, he baniſhed her to Coptus, and then married his ſiſter Arſinoè, and adopted as her children thoſe he had had by the other Arſinoè. This Arſinoè, his ſiſter, was worſhipped by the Egyptians under the title of Diva Soror, and Venus Zephyritis. Chiſhull.

[27] ΘΕΩΝ ΑΔΕΛΦΩΝ.

[28] ΘΕΩΝ ΣΩΤΗΡΩΝ.

on

on the father's ſide from Hercules ſon of Jupiter, and on the mother's ſide from Dionyſus ſon of Jupiter, [that is, Ptolemy ſon of Ptolemy and Arſinoè, grandſon of Ptolemy and Berenícè,] receiving from his father the kingdom of Egypt, Africa, Syria, Phenicia, Cyprus, Lycia, Caria, and the Cyclades, invaded Aſia with his land and ſea forces, and with elephants from the country of the Troglodytes and Ethiopians. This body of elephants[29] was firſt collected out of theſe countries by his father and himſelf, and brought into Egypt and tamed for the ſervice of war. With theſe forces Ptolemy advancing into Aſia[30] reduced all the country on this ſide the Euphrates, as well as Cilicia, the Helleſpont, Thrace, and all the forces in thoſe provinces. In this expedition, having captured alſo many Indian elephants, and ſubjected all the princes to his obedience, he croſſed the Euphrates, entered Meſopotamia, Babylonia, Suſiana[31], Perſis, Media, and the whole country as far as

[29] A fact noticed by all the hiſtorians, and preſerved by Agatharchides, as almoſt the only commerce remaining on this coaſt in the time of Philomêtor.

[30] So very little of this conqueſt appears in hiſtory, that, having this inſcription only in Thevenot's work, I had doubted the whole, till I met by accident with the paſſage in Appian, which confirmed the fact, and again attracted my attention; but having afterwards procured Chiſhull's work, (Antiquitates Aſiaticæ,) I found he had anticipated this paſſage, and many of the other obſervations which I had taken ſome pains to collect. See Ap. Syriac. p. 635. Schweighæuſſer's ed. St. Jerom on Daniel mentions theſe conqueſts; and Appian notices that the Parthian revolt commenced upon the diſtreſs of the Syrian monarchs in this war.

[31] Rollin touches on this expedition of Ptolemy, but makes it ſtop at the Tigris, vol. vii. p. 307. but Ptolemy here expreſsly ſays he entered Suſiana, and as Rollin confeſſes the reſtoration of two thouſand five hundred Egyptian ſtatues we may aſk, where could they be found except at Suſa? The cauſe of this invaſion was the inſult offered to Berenícè, ſiſter of Energetes, whom Antiochus Theos had divorced and whom Seleucus, his ſon by Arſinoè, finally put to death. See Juſtin, lib xxvii. c. 1. Juſtin mentions that he would have ſubdued the whole kingdom of Seleucus, unleſs he had been recalled by diſturbances in Egypt. The two thouſand five hundred ſtatues, and forty thouſand talents, I find in the notes on Juſtin, but whence deduced I know not.

Bactria,

Bactria"[32], and brought the whole under his dominion. [In Perſis and Suſiana] he collected all the ſpoils of the temples which had been carried out of Egypt by [Cambyſes and] the Perſians, and conveyed them back again to that country[33], with all the treaſures he had accumulated in his conqueſts, and all the forces which had attended him on the expedition; all theſe he embarked upon the canals[34] * * * * * * * * *

[32] Ptolemæus Euergetes devicit Seleucum; omnia ſine bello et certamine occupavit a Tauro uſque in Indiam; Bayer, p. 61. Bayer moderates the conqueſt, and appeals to Theocritus and the Adulitick marble. But the marble certainly confirms in a great degree the citation, which is from Polyænus.

[33] It is for this favour to the natives that he is ſaid to have been ſtyled Euergetes, the benefactor.

[34] The inſcription is here manifeſtly left imperfect, and that apparently on account of that part of the tablet which was mutilated. We are therefore at liberty to conjecture what theſe canals were, conſiſtent with the nature of the countries alluded to. Chiſhull looks to the canals on the Euphrates; but let us reflect, that the palace of Cambyſes was at Suſa; thither the ſpoils of Egypt were ſent by the conqueror, and there they would be found by Euergetes, if they had not been removed by the Macedonians, or the kings of Syria. Much notice is taken in hiſtory of the treaſures at Suſa being plundered; but the ſpoils of temples, Egyptian gods and ſtatues had little to tempt the avarice of the conquerors, and would have been moved to little purpoſe, at a great expence. It is highly probable, therefore, that Euergetes found them ſtill at Suſa; and if we conſider that Suſiana was of all the provinces of the Perſian empire, the one moſt furniſhed with, and moſt interſected by canals, we ſhall have no difficulty in concluding, that theſe cumbrous deities were embarked upon that canal which united the Eulæus with the Meſerean near Suſa; and that they were brought by this ſtream, now called the Suab or Soweib, into the Euphrates near Korna. From Korna they would be conveyed up the Euphrates to Thapſacus, or higher, and require no other land carriage but from that point to the bay of Iſſus. This would certainly be the beſt and leaſt expenſive conveyance from Suſa to Egypt, and there could be no other water carriage unleſs by the Eulæus to the Gulph of Perſia, and ſo round the continent of Arabia into the Red Sea. If it could be proved from hiſtory that the fleets of Euergetes had ever circumnavigated Arabia, we might admit this as the readieſt mode of conveyance; but I have ſearched hiſtory in vain to eſtabliſh this concluſion. If it was contained in the point of the tablet broken, we have much reaſon to lament the loſs; for ſo perſuaded am I of the authenticity of the inſcription, that I ſhould admit the fact without heſitation, if found there. I can only now add, that the canal from Suſa to the Euphrates, and the carriage thence up to Thapſacus, afford the moſt probable clue to this paſſage.

This, ſays Coſmas, was the inſcription on the figure or tablet, as far as we could read it, and it was nearly the whole, for only a ſmall part was broken off. After that we copied what was written on the chair, which was connected with the inſcription already given, and ran thus:

After this, having with a ſtrong hand compelled the tribes bordering upon my own kingdom to live in peace, I made [35] war upon the following nations [36], and after ſeveral battles reduced them to ſubjection.

[35] Mark the uſe of the firſt perſon. Whether the change from the third perſon to the firſt be cauſed by Coſmas or the inſcription, muſt be doubtful. We might well ſuppoſe both inſcriptions to run in the firſt.

[36] Coſmas has many curious particulars of theſe countries himſelf; as, 1ſt. The Homerites are not far diſtant from the coaſt of Barbaria [Adel]; the ſea between them is two days' ſail acroſs. This proves that he places the Homerites ſomewhere eaſt of Aden on the ocean.

2. Beyond Barbaria [Adel] the ocean is called Zingium [Zanzibar the Caffre coaſt], and Saſus is a place on the ſea coaſt in that tract. This ſea alſo waſhes the incenſe country [Adel and Adea], and the country where the gold mines are.

3. The king of Axiomis ſends proper perſons there by means of the governour of the Agows to traffick for gold. Many merchants join this caravan, and carry oxen, ſalt, and iron, which they exchange for gold. They leave theſe articles and retire,—when the natives come and leave as much gold as they chuſe to offer. If this is thought ſufficient, on their return they take the gold and leave the articles.

This is a very extraordinary paſſage, as it proves that the Abyſſinians traded in that age, as they ſtill do, not by ſea, but inland through their ſouthern provinces. And the exchange is ſimilar to modern practice, both on the borders of Abyſſinia, and other tribes of Africa. Montf.

4. The winter [that is the rainy ſeaſon,] in Ethiopia is in our ſummer; the rains laſt for three months from Epiphi to Thoth, ſo as to fill all the rivers and form others, which empty themſelves into the Nile. Part of theſe circumſtances I have ſeen myſelf, and others I have heard from the merchants who trade in the country.

5. The great number of ſlaves procured by all the merchants who trade in this country; a trade noticed equally by the Periplûs near 500 hundred years before Coſmas, and by Bruce 1200 years after his age. It is worthy of remark that Abyſſinian ſlaves bear the firſt price in all the markets of the eaſt, and the preference ſeems to have been the ſame in all ages. Montfaucon, tom. ii. p. 144. Nova Col. Patrum.

Firſt the nation of Gazè, next Agamè and Siguè. Theſe I ſubdued, and exacted the half of their property by way of contribution for my own uſe[37].

After theſe I reduced Ava and Tíamo or Tziamo, Gambela and the country round it, Zingabênè, Angabè, Tíama, and the Athagai, Kalaa, and Semênè, (a nation[38] beyond the Nile,) among mountains difficult of acceſs, and covered with ſnow; in all this region there is hail and froſt, and ſnow[39] ſo deep that the troops ſunk up to their knees. I paſſed the Nile to attack theſe nations, and ſubdued them.

I next marched againſt Láſinè and Zaa and Gábala, tribes which inhabit mountains abounding with warm ſprings; Atalmo alſo and Bega, theſe likewiſe I reduced, and all the nations in their neighbourhood.

After this I proceeded againſt the Tangaítæ[40], who lie towards the confines of Egypt; theſe I reduced, and compelled them to open a road of communication from this country into Egypt. The next tribes I ſubdued were Anninè and Metinè, who were ſeated upon mountains almoſt perpendicular; and Seſea, a tribe which had

[37] Ἀλλ' ἄνδιχα πάντα δάσασθαι. Hom. x. p. 120. The Homerick cuſtom of taking half and leaving half.

[38] Λέγει ἔθνη τὰ πέραν τῦ Νείλυ, which Montfaucon reads in a parentheſis, as no part of the inſcription, but as an obſervation by Coſmas. But the fact is true, Samen is beyond the Tacazzè.

[39] Bruce utterly denies the exiſtence of ſnow in Abyſſinia; but it does not quite follow from this that ſnow was unknown in former ages. Horace ſays Soracte ſtat nive candida, but the moderns obſerve this now never happens. Lobo aſſerts that ſnow falls in Samen on Sámenè, but in very ſmall quantities, and never lies, p. 578. Fr. ed. Bruce calls Lobo a liar, but in many inſtances not without manifeſt injuſtice. He allows himſelf that Samen is a ridge eighty miles in extent; the higheſt part is the Jews' rock, where there was a kingdom of Jews till within theſe few years.

[40] If it were poſſible to identify this tribe with Dangola, it would be a great acquiſition to geography. Dangola lies exactly in the proper place, as may be ſeen by Bruce's map.

retired to a mountain abſolutely inacceſſible to an army; but I ſurrounded the whole mountain, and ſat down before it, till I compelled them to ſurrender; I then ſelected the beſt of their young men, their women, their ſons and daughters, and ſeized all their property for my own uſe.

My next attempt was upon Rauſo, an inland tribe in the frankincenſe country, a region without mountains or water; [from this tract I penetrated again to the coaſt, where] I found the Solatè, whom I ſubdued, and gave them in charge to guard the coaſt [from pirates].

All theſe nations, protected as they were by mountains almoſt impregnable, I ſubdued, and reſtored their territories to them upon conditions, and made them tributary; other tribes ſubmitted alſo of their own accord, and paid tribute upon the ſame terms.

Beſides the completion of this, I ſent a fleet and land forces againſt the Arabites[41], and the city of Kinedópolis on the other ſide of the Red Sea; I reduced both to pay tribute, and gave them in charge to maintain the roads free from robbers, and the ſea from pirates[42], ſubduing the whole coaſt from Leukè Komè to Sabêa. In the accompliſhment of this buſineſs I [had no example to follow, either of the ancient kings of Egypt, or of my own family, but] was the firſt to conceive the deſign, and to carry it into execution.

[41] Arabians.

[42] The coaſt of Arabia, north of Yambo, has been notorious for pirates and robbers in all ages. Leukè Komè, or the White Village, we ſhall fix when we come to the coaſt of Arabia in the third book; it cannot be far from Yambo; and the coaſt from this village to Sabêa or Yemen was the ſeat of all the trade from Egypt, both for native and Indian commodities, till the Romans were maſters of Egypt. The Romans had a garriſon in Leukè Komè, and a cuſtom-houſe, where they levied 25 per cent. on all goods. See Periplûs Maris Eryth. p. 11. Hudſ. Leukè Komè ſeems, in the time of Coſmas, to have fallen into obſcurity.

For

For my ſucceſs in this undertaking I now return my thanks to Mars, who [43] is my father, and by whoſe aſſiſtance I reduced all the nations from [Bactria on] the north, to the Incenſe coaſt on the ſouth; and from Libya [on the weſt,] to Ethiopia and Saſus [44] on the eaſt. Some of theſe expeditions I entruſted to my officers; but in moſt of them I was preſent, and commanded in perſon.

Thus having reduced the whole world [45] to peace under my own authority, I came down to Adulè, and ſacrificed to Jupiter, to Mars, and to Neptune, imploring his protection for all that navigate [46] [theſe ſeas].

[43] Ὃς με καὶ ἐγέννησε, *the father who begot me.* It is a remarkable expreſſion. He has already ſaid he was the ſon of Ptolemy and Arſinoè, deſcended from Hercules and Diony'ſus, and now Mars is his immediate father. Whatever vanity there may be in the ſovereigns, or flattery in the ſubjects, there is ſtill ſomething analogous in theſe Macedonian genealogies. Alexander is not the ſon of Philip, but of Jupiter Ammon. His courtiers, and the family of his courtiers, follow the example of their monarch. They are gods and ſons of gods, Θέοι βασιλῆς, Θέοι Σωτῆρες. The preſumption is rather peculiar, for we may ſay to every one of them, Matris adulterio patrem petis.

[44] From Abyſſinia to the Bay of Zeyla. Saſus is manifeſtly a place on the coaſt of Adel.

[45] The whole world is aſſumed by many conquerors for the world around them. Alexander and the Romans did not conquer the whole world, but uſed the ſame language.

[46] Ὑπὲρ τῶν πλωιζομένων.

It appears fully from this paſſage that Euergetes engaged in this expedition on the plan of his father Philadelphus, for the extenſion and protection of commerce, and that he awed the whole coaſt on both ſides the Red Sea, making them at leaſt tributary, if not a part of his kingdom: but it no where appears that he paſſed the Straits of Bab-el-Mandeb. Though he viſited the Moſyllitick marts, his approach to them was not by ſea, but through the interior of Abyſſinia and Adel, as appears by his march from Rauſo to Solatè, which muſt be on the coaſt, from his giving it in charge to the natives to preſerve the peace of the ſea. The execution of theſe deſigns, with the opening a communication inland from Abyſſinia to Syênè, marks the grandneſs and wiſdom of his ſyſtem, as clearly as if we had a hiſtory of his reign, and a detail of his expeditions. Of the latter there is not a trace remaining but this monument. It is ſtill more extraordinary, that in leſs than ſeventy years all the notice of this expedition ſhould have ſunk into ſilence, and that Agatharchides ſhould ſay nothing of this plan, but ſo far as relates to the elephants procured at Ptolemáis Thêrôn. Can this be adduced as an argument againſt the reality of the marble? I think not; and I truſt it to its internal evidence.

But if the authenticity of the marble be allowed, what light does it not throw on the boaſted

ſeas]. Here alſo [at Adulè] I reunited all my forces, [which had been employed on both coaſts of the Red Sea,] and ſitting on this throne, in this place, I conſecrated it to Mars, in the twenty-ſeventh yeai of my reign [47].

Abyſſinian names of Places in the Inſcription. Conſult Bruce's Map. vol. v. and Ludolfus, p. 14.

Gaza. Geez? but dubious, as it is one of the places firſt mentioned, and Geez is very far inland; Montfaucon. Pliny's Gaza near Moſyllon is noticed by Chiſhull; but theſe places in the commencement ſeem all between the coaſt and the Tacazzè, or its neighbourhood.

boaſted diſcoveries of the Ptolemies? It proves, that whatever might be the progreſs of Timoſthenes down the coaſt of Africa in the reign of Philadelphus, that no commerce was eſtabliſhed upon it in the reign of his ſon. It proves that the Greeks of Egypt did not yet trade beyond the ſtraits, or on the Moſyllitick coaſt, though they meditated the attempt. It proves that they did not yet go to Aden, but traded to Yemen within the the ſtraits; and that one object of this expedition was to clear the Arabian coaſt of pirates, from Leukè Komè to Sabêa; that is, from the top of the Gulph to the bottom. In the whole account not a word eſcapes that implies a trade with the marts of Arabia on the ocean beyond the ſtraits, nor does it afford any reaſon to believe that the continent of Arabia was yet circumnavigated, or the diſcoveries of the Ptolemies brought in contact with thoſe of Alexander.

This has been my inducement for introducing this marble to the knowledge of the reader, agreeably to my deſign of tracing the diſcoveries of the ancients ſtep by ſtep; and I conclude this account with remarking, that commerce rather fell ſhort than proceeded in the following reigns; for it ſtopped at Sabêa on the Arabian ſide, as it does in this marble, and on the African ſide it did not go ſo low in the reign of Philometor as in that of Euergetes.

[47] Chronologers aſſign 26 years to the reign of Euergetes. But if a king commenced his reign in June, for inſtance, and died in October, it might be 26 years in a chronicle, and yet the 27th would have commenced. Chiſhull ſuppoſes this to be the fact. Dodwell ſuppoſes Euergetes to have been crowned during his father's life time; and we add, that an error (if it is ſuch) in numbers may be more readily imputed to a MS. than made to impeach the marble.

Agamè.

Agamè. A government in Tigrè; Montf. Ludolf. p. 17. Agam ſignifies Jeſſamine; Bruce.

Siguè. Bruce mentions Zaguè as a province, vol. ii. p. 534. elſe it might be thought Tigrè, from the places mentioned with it; or Siguè for Sirè; Σιγυὴ, Σιρυὴ.

Ava. The province between Adulè and Axuma. Nónnoſus; Chiſhull. Axuma is in the province of Tigrè. Ava is ſtill found as a diſtrict of Tigrè.

Tiamo or Tziamo. Tzama a government of Tigrè near Agame; Montfaucon. It ſeems to be the kingdom of Damot. But there is a Tzama in Begemder; Ludolf. p. 14.

Gambêla, Gámbela. There is a Gaba noticed by Ludolf, but nothing to mark its relation to Gámbela.

Zingabênè. The country of the Zangues, Zinguis, or Caffres.

Angabè, read Anga-bênè. The kingdom of Angot.

Tiama. Tiamaa, Vatican MS. Tigrè-mahon! a mere conjecture. But Mahon, Macuonen, ſignifies a governor or government; Ludolf. p. 20. It is idle to ſearch for an equivalent, as it is poſſibly only a repetition of Tiamo.

Ath-agai, Agoa; Montf. Agows; Bruce.

Kalaa. Nothing occurs but the mention of it with Semênè.

Semênè, Samen, Semen. Montf. The Tacazze is the boundary between Samen and Sirè; Bruce, iii. p. 252. The ſnow mentioned in

in the Inſcription is denied by Bruce, but the mountains, eighty miles in length, are acknowledged by him; Ibid. And the Inſcription mentions paſſing the Nile (Tacazzè) to Semêne.

Laſinè. Still ſo called; Coſmas; Laſta.

Zaa. Still ſo called; Coſmas. Xoa, Shoa, or Sewa; Ludolf.

Gabala. Still ſo called; Coſmas. There is a kingdom of Bali in Ludolph, p. 14. and a Gaba, p. 15. but nothing certain.

At-almo. Lamalmon the great mountain. At, ſeems to be an article or prefix, as in Ath-agai.

Bega. Beja and Begemder are ſtill two provinces of Abyſſinia.

Tangaitæ. Voſſius reads Pangaitæ, in order to prove that Panchaia the Frankincenſe country is not in Arabia but Africa; Voſ. ad Pomp. Mel. lib. iii. c. 8. Chiſhull. But the Tangaitæ are a tribe between Abyſſinia and Egypt, i. e. at Sennaar, Dongola, or Meroè, moſt probably at Sennaar or Dongola. Dongola is written Dangola, not unlike Tanga. But whether Dangola is an ancient name I cannot diſcover.

Metinè, Anninè. Nothing occurs to aſcertain theſe places. The Inſcription paſſes from the northern frontier of Abyſſinia to the ſouthern with theſe names between, noticing only that they are mountainous.

Séſea. Barbaria, coaſt of Adel; Coſmas. Apparently on the mountains which divide Adel from Abyſſinia. See Bruce, vol. iii. p. 250.

Rauſo. Barbaria; Coſm. According to the Inſcription itſelf it is inland from the frankincenſe coaſt of Barbaria (Adel), and Solatè is on the coaſt.

Solatè. Barbaria; Coſm. Theſe three places correſpond in number with the three on the Moſyllitick coaſt mentioned in the Periplûs. The modern maps have a Soel.

Arabites. Homerites; Coſmas. But Coſmas is in an error. The Homerites are on the ocean; theſe are the Arab tribes on the coaſt of the Red Sea oppoſite to Suakem and Abyſſinia, as appears by the Inſcription.

Kinêdópolis. Homerites; Coſmas. But Coſmas is miſtaken. It lies on the coaſt of Arabia not far from Yambo, between Leukè Komè and Sabêa, agreeably to the Inſcription itſelf. See Ptolemy, Aſia; tab. vi.

Pirate Coaſt. Not noticed as ſuch, but their piracies marked. Probably the Nabathêans or wild tribes above Yambo, always pirates, and ſubdued by the later Ptolemies and by the Romans. They are pirates at this day.

Leukè Komè. Leukogen, in the country of the Blemmyes; Coſmas. Another proof that Coſmas could not be a forger, for Leukè Komè is in Arabia, above Jidda, and he places it in Ethiopia. It is the Haws of d'Anville.

Sabêa. The Homerites; Coſmas. But really Yemen, the Arabia Felix of the ancients.

Saſus. At the extremity of Ethiopia where gold called Tancharas is obtained. It lies upon the ſame ocean as Barbaria (Adel), where frankincenſe is procured; Coſmas. By Ethiopia he means Abyſſinia, and Saſus muſt be near Zeyla.

Adûlè. The port of Abyſſinia in the Bay of Maſuah.

No. III.

ΕΙΤΕΝΗΔΙΟΜΜΕΝΟΥΘΕΣΙΑΣ.

THE readings of this extraordinary polyſyllable are as numerous almoſt as the editions, and the authors who have had occaſion to cite it. The corruption is evident to all, but no two agree in the correction.

The whole paſſage ſtands thus:

Μεθ' ὃν, ποταμοὶ πλέιονες, καὶ ἄλλοι συνεχεῖς ὅρμοι, διηρημένοι κατὰ σταθμοὺς καὶ δρόμους ἡμερησίους πλέιους, τοὺς πάντας ἑπτὰ, μέχρι Πυραλάων[48] νήσων, ΚΑΙΝΗΣ ΛΕΓΟΜΕΝΗΣ ΔΙΩΡΥΧΟΣ, ἀφ' ἧς μικρὸν ἐπάνω ΤΟΥ ΛΙΒΟΣ, μετὰ δύο δρόμους νυχθημέρους, παρ' ΑΥΤΗΝ ΤΗΝ ΔΥΣΙΝ ΕΙΤΕΝΗΔΙΟΜΕΝΟΥΘΕΣΙΑΣ ἀπαντᾷ νῆσος.

Salmaſius reads παρ' αὐτὸ τὸ Πράσον ἄκρον εἰς ἕω Μενυθιὰς ἀπαντᾷ νῆσος. Blancard follows Salmaſius, but in this correction, τὸ Πράσον ἄκρον is aſſumed without a ſhadow of reſemblance, and is as wrong in point of geography as criticiſm. The Menûthias of the Periplûs has no reference to Praſum whatever; and the miſtake of Salmaſius ariſes from ſuppoſing that the Menûthias of Ptolemy and the Periplûs are the ſame, which they certainly are not.

Others read,

Εἴτε Μενυθιὰς ἀπαντᾷ νῆσος.

Εἴτε νὴ δι' ἕω Μενυθιὰς ἀπαντᾷ νῆσος.

[48] The Baſil edition reads ἐπ' ἄνω Πυραλάων.

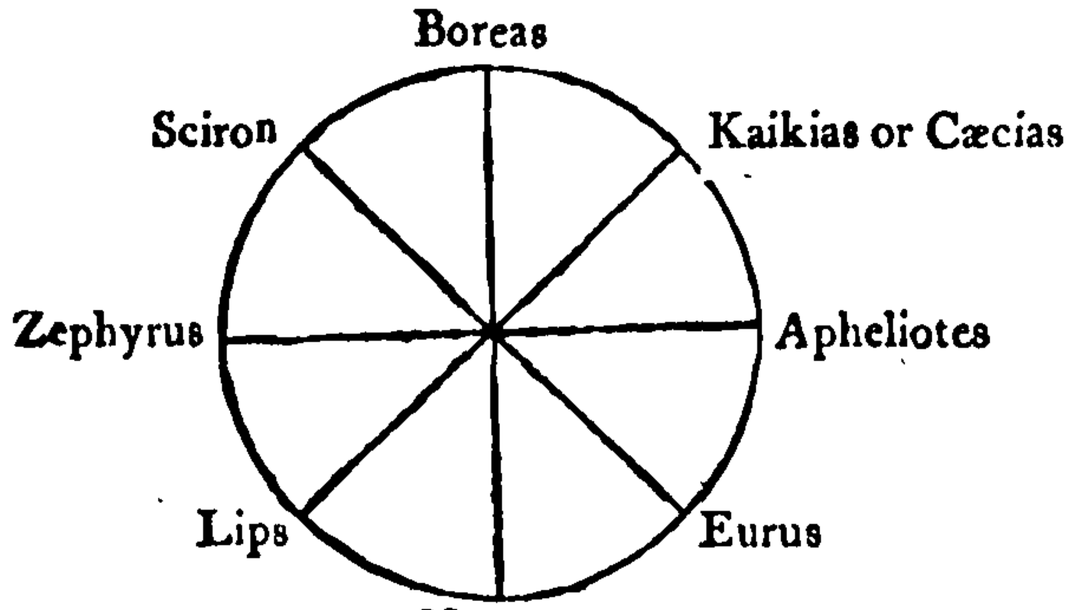
Henry Jacobs, in Hudſon's Minor Geographers, vol. iii. p. 68. reads,

παρ' ἀυτὴν τὴν δύσιν ἔις τι νότιον Μενυθιὰς ἀπαντᾷ νῆσος.

But Henry Jacobs adds alſo, that Praſum is not Moſambique but the Cape of Good Hope. He can find no authority for this, but the eſtimate of Marínus, and Marínus himſelf corrects his excefs, and reduces his latitude of 34° ſouth to 23° 30′ 0″. See Ptol. lib. i. c. 7.

Impreſſed with the appearance of theſe difficulties, I venture on the following diſcuſſion with no common uncertainty; and little practiſed as I am in the ſcience of correction, I decline the grammatical and critical part of the inquiry, and wiſh to confine my reflections almoſt wholly to what is purely local and geographical.

I. Firſt then it is to be obſerved that our author has certainly not more than eight[49] quarters of the heavens, or as we ſhould ſay in modern language, eight points of the compaſs, the ſame number as is marked upon the eight fronts of the Temple of the Winds at Athens, under the following appellations:



[49] It is not intended to ſay that the whole eight occur in the Periplûs, but that it has not more than eight. It uſes Aparctias for the north, Duſis for the weſt.

In

In the application of theſe, or the terms equivalent to theſe, the Periplûs is by no means accurate; of this we have a direct proof in laying down the coaſt at Arômata, and in its neighbourhood, where, if our charts are accurate, as they are generally at leaſt, it is impoſſible to apply the points of the Periplûs to the actual ſtate of the coaſt.

II. Secondly, let us examine the points of the compaſs ſpecified by the author in this paſſage, and his manner of expreſſing them; theſe are ἐπάνω τοῦ Λιβὸς, or ἐπ' ἄνω [50], and παρ' αὐτὴν τὴν δύσιν, anſwering to the weſt and ſouth weſt in the foregoing figure; and here it is obſerved, that ἐπάνω or ἐπ' ἄνω τοῦ Λιβὸς, is not known as a Greek idiom. But let us ſuppoſe it to be a nautical phraſe, how is it to be interpreted? Africum verſus à ſuperiori parte? Altius quam Africus? *Above* the ſouth weſt? If this has a meaning in Greek what is to be underſtood by *above*? Is it more to the ſouth or more to the weſt? that is, is it ſouth weſt by weſt, or ſouth weſt by ſouth? The difficulty which occurs here, induces Dr. Charles Burney, of Greenwich, to diſcard the expreſſion and to read ἐπ' ἀνατολὴν, for ἐπάνω τοῦ Λιβὸς.

In the next place how are we to underſtand παρ' αὐτὴν τὴν δύσιν? Παρὰ, according to the lexicons, has a ſenſe of motion to a place. In which form it might be rendered directly to the weſt, to the *weſt direct*. The general uſage for this in the Periplûs is εἰς Νοτον, p. 7. εἰς ἀνατολὴν, ibid; but in p. 9. almoſt immediately preceding the paſſage before us, παρ' αὐτὸν ἤδη τὸν Λίβα ſeems to expreſs the direction [51] of the

[50] Ἐπάνω with a genitive is in common uſe, but whether it can be uſed with a wind, or in what ſenſe, is dubious. Ἐπάνω τοῦ στερεώματος, above the firmament, is a known idiom.

[51] The primitive ſenſe of παρὰ, ſeems to be juxtapoſition, or ſide by ſide, as παρηόρος, παραπλαγας. See Odyſ. E. 418. 440. ἠιονας παραπλῶγας, where the waves do not break directly againſt the coaſt, but run along the ſide of it.

coaſt lying ſouth weſt and north eaſt as we ſhould expreſs it in Engliſh, or the courſe of a veſſel along the coaſt in a ſouth weſt direction.

III. Thirdly, we muſt inquire how theſe expreſſions can be applied in any of their ſenſes to the actual geography of the coaſt and iſland; and here I *aſſume* Menûtheſias or Menûthias for one of the Zanguebar iſlands, from the diſtance ſpecified, which is at thirty ſtadia from the coaſt, equal to eight or ten miles, and correſponding with the diſtance of no other iſlands in this part of the voyage. Of the three Zanguebar iſlands, Monfia the third, or ſouthernmoſt may well be preferred from the account of diſtances in the Periplûs, both previous and ſubſequent. And if we aſſume Monfia, our next inquiry muſt be, how this lies with reſpect to the coaſt; the chart will ſhew that it lies directly eaſt. A ſufficient cauſe to juſtify the reading of Dr. Charles Burney, of ἐπ' ἀνατολὴν, for ἐπάνω τῦ Λιβὸς. But let us try if ἐπάνω τῦ Λιβὸς has a meaning, how it could be applied. I have aſſumed Mombaça for the Pyraláan iſlands, or rather for the Καινὴ διώρυξ, the new canal [58]. The veſſel is plainly ſetting out from this point, [καὶ τῆς καινῆς λεγομένης διώρυχος, ἀφ' ἧς μικρὸν ἐπάνω τῦ Λιβὸς,] that is, from Mombaça, and going down to an iſland eight or ten miles diſtant from the coaſt. The coaſt itſelf runs ſouth weſt, but if ſhe is to ſtand off the coaſt for the iſland, ſhe runs not ſouth weſt, but more towards the ſouth than ſouth weſt. Now this is actually the courſe a veſſel muſt hold to run from Mombaça to Monfia. It would not be ſouth direct, but a little to the ſouth of

[58] The proofs will be found p. 153. et ſeqq. ſupra.

ſouth

ſouth weſt. If therefore ἐπάνω τῦ Λιβὸς can be made a Greek idiom, or a Greek nautical phraſe, this I conclude is the only interpretation it could bear. It muſt be noticed likewiſe, that this expreſſion muſt be applied to the courſe of the veſſel, as παρ' αὐτὴν τὴν δύσιν muſt apply to the poſition of the iſlands, it is joined with μετὰ δύο δρόμυς νυχθημέρους, as παρ' αὐτὴν τὴν δύσιν, is joined with ἐιτενηδιωμμενυθεσίας ἀπαντᾷ νῆσος.

What then is παρ' αὐτὴν τὴν δύσιν . . . . ἀπαντᾷ νῆσος? That I have ſcarce the hardineſs to ſay. *Weſt* it cannot be, for whatever lies weſt from Mombaça, or any point on the coaſt, muſt lie inland on the continent of Africa. Neither can it ſignify the iſland itſelf lying eaſt and weſt, or the three iſlands taken together, for they lie nearly north and ſouth. This reduces a commentator to his laſt reſource, which is either to ſay that δύσιν is a falſe reading, or to find another ſenſe for it, if it muſt be retained. I confeſs this dilemma moſt candidly, and have no more confidence in the following ſuggeſtion, than juſt ſuch as the reader ſhall pleaſe to give it.

I do not diſcard δύσιν, but give it another ſenſe, as the only alternative left to my choice. It has been noticed in the preceding work that δύσις and ἀνατολὴ, beſides their literal meaning of weſt and eaſt, have likewiſe a relative ſenſe given to them by mariners, in which they are applied to the general tendency of the voyage rather than to the quarters of the heavens, in regard to the ſhip's place, or the individual point where the mariner is at the moment he is ſpeaking. It is owing to this that when a veſſel is proceeding from Moſambique on her voyage to India we read in her journal that ſhe ſailed to the eaſtward, though undoubtedly her courſe was north or north eaſt; or if ſhe is proceeding to the Cape, it is ſaid ſhe ſailed

to

to the weſtward, though her courſe is certainly ſouth or ſouth weſt. An expreſſion adopted on our own coaſt[53] alſo, and perhaps on every other; and I can now ſhew that this is the language of the Periplûs beyond diſpute; for (at p. 35.) when the author is deſcribing the paſſage round Cape Comorin he has theſe words, *περὶ δὲ τῶν μετ' αυτὴν [Λιμυρικὴν] χωρῶν, ἤδη πρὸς ανατολὴν τᾦ πλοὸς ἀπονεύοντος, εἰς πέλαγος ἔκκειται πρὸς ἀυτὴν τὴν* ΔΥΣΙΝ, *νῆσος λεγομένη* Παλαισιμύνδυ, *παρὰ δὲ τοῖς ἀρχαίοις ἀυτῶν* Ταπροβάνη; that is, "When the courſe "takes an inclination to the eaſt round the coaſt, [or on that part of "the coaſt] which ſucceeds to Limyricè, there lies out at ſea directly "to the *weſt* [ſouth] an iſland called Palæſimoondoo, [by the "natives,] but which their anceſtors uſed to call Tapróbana." The expreſſion here is preciſely the ſame, except that it is *πρὸς ἀυτὴν τὴν δύσιν*, inſtead of *παρὰ ἀυτὴν τὴν δύσιν*. Πρὸς intimating, as I conceive, the point of the compaſs, and *παρὰ* the courſe of a veſſel in that direction. And if we now aſk, what is the meaning of *Δύσιν*, the map will ſhew in an inſtant, that Ceylon does not lie WEST from the continent but SOUTH. It is on this evidence that I wiſh to render *Δύσιν* ſouth, in the paſſage before us, remarking that the three Zanguebar iſlands lie directly SOUTH from Mombaça. If this be rejected, I do not ſee how to find any application for the term *weſt*, in relation to any part of the coaſt, or to any other iſland in the neighbourhood.

IV. We come now to the word which is the cauſe of all this ſpeculation, and in *Ἐιτενηδιωμμενυθεσίας* all the commentators are agreed, that Menûthias in ſome form or other is to be collected out

[53] The trade to the Baltick is always called the Eaſt Country Trade.

of

of the latter part of the polyſyllable. I ſhould have wiſhed to conſider Menûthias as an adjective rather than a ſubſtantive, Menutheſian rather than Menuthias. In *νηδίωμ* I am led to *νησίων*, both by the context and the letters, for *νηδίωρ* is *νηδίων* in the writing of MSS., and *ν* is often turned into *μ*, not merely by an error of the copyiſt, but by coming before another *μ*. If this be allowed, the change of *δ* into *σ* ſeems to give *νησίων* with great facility.

Let us then examine what the geography requires. It requires that Menûthias, if it is Monfia, ſhould be deſcribed as *one of the three Menûtheſian or Zanguebar iſlands*, or it ſhould be deſcribed as *the ſouthernmoſt of the three Menûtheſian or Zanguebar iſlands*. This is the ſenſe I want to elicit from the corruption; and with as little change of the form as poſſible, I propoſe the following conjectures:

Παρ' αὐτὴν τὴν δύσιν τῶν νησίων Μενυθεσίων, ἀπαντᾷ νῆσος.

Παρ' αὐτὴν τὴν δύσιν ἓν ἐκ τίνων [or ἐκ τριῶν] νησίων, Μενυθεσίας ἀπαντᾷ νῆσος.

But the form I prefer is,

Παρ' αὐτὴν τὴν δύσιν ἤδη τῶν νησίων, Μενυθεσίας ἀπαντᾷ νῆσος, or

Παρ' αὐτὴν τὴν δύσιν ἔτι νησίων [or νησιδίων ἁπάντων] Μενυθεσίας ἀπαντᾷ νῆσος.

In which caſe *ἁπάντων* may have been dropped by the repetition of *ἀπαντᾷ*. And in theſe ſeveral readings I ſhould refer *νησίων* to the Pyralaan iſlands immediately preceding, and interpret the paſſage thus:

Almoſt directly ſouth then of the [*Pyralaan*] *iſlands you meet with the iſland Menûtheſias*, the laſt of *all* the iſlands.

Ἤδη[54] is a particle frequently uſed in this manner by the author, and occurs in this very page, παρ' αὐτὸν ἤδη τὸν Λίβα, but if the letters are to be regarded, perhaps παρ' αὐτὴν τὴν δύσιν ἔτι νησίων Μενυθεσίων, ἀπαντᾷ νῆσος; or, παρ' αὐτὴν τὴν δύσιν ἔτι νησίων [Πυραλάων] Μενυθεσίας ἀπαντᾷ νῆσος, approach nearer to the form of writing than any others, that will bear a ſenſe of any ſort.

I am ſenſible that it is no true canon of criticiſm to bend the words to the ſenſe we wiſh to find; I confeſs freely I am not ſatisfied with any of theſe corrections, for in this very page the author uſes εἰς τὸν Νότον for the ſouth, and παρ' αυτὸν ἤδη τὸν Λίβα for the ſouth weſt; and it is not eaſy to conceive why he ſhould have uſed δύσιν here inſtead of νότον, if it were to ſignify the ſame point. The only defence I can make, is, to repeat, that no iſland on the coaſt can lie weſt from the coaſt, and if it is weſt from any other place, that place I cannot diſcover[55]. I ſubmit, therefore, the whole of this diſcuſſion to the candour of the reader, and thoſe more practiſed in critical corrections, with ſome confidence that if I have not completed the ſolution of the difficulty, I may have afforded grounds for future commentators to proceed on.

[54] Ἤδη is eaſier to conceive than to render; Abhinc in paſſages of this conſtruction follows more readily than mox, continuo, &c. but it is better rendered by *nearly*; ἤδη δὲ ἦν ἡμέρα, it was *juſt* day.

[55] The only poſſible relation in which I can conceive δύσιν to be employed, is, in regard to the ſhip's courſe when ſhe is running down the *weſtern* ſide of the Zanguebar iſlands. But ſuch a courſe would never be expreſſed by παρ' αὐτὴν τὴν δύσιν, in the language of the Periplûs; for if it were, the courſe down the coaſt of the main, oppoſite to Zanguebar muſt then be expreſſed by παρ' αὐτὴν τὴν ἀνατολήν, as the ſhip is going down the eaſtern ſide of the continent; but this is not ſo expreſſed, it is παρ' αυτὸν ἤδη τὸν Λίβα, in which the direction of the courſe is marked, and not the ſhip's courſe on the eaſtern ſhore.

I now

I now read the whole paſſage thus:

Hudſon.	*Propoſed Text.*	*Tranſlation.*
Ἔιθ' ὁ Νίκωνος· μεθ' ὃν, ποταμοὶ πλέιονες, καὶ ἄλλοι συνεχῆις ὄρμοι, διηρημένοι κατὰ ϛαθμὺς καὶ δρόμως ἡμερησίους πλέιως, τὺς πάντας ἑπτὰ, μέχρι Πυραλάων [56] Νήσων [57], Καινῆς λεγομένης Διώρυχος. ἀφ' ἧς μικρὸν ἐπάνω [58] τῦ Λιβὸς [59], μετὰ δύο δρόμως νυχθημέρως, παρ' ἀυτὴν τὴν δύσιν Εϊτενηδιωμμενηθεσίας ἀπαντᾷ Νῆσος, ϛαδίων ἀπὸ της γῆς ὡσεὶ τριακοσίων, ταπεινὴ καὶ καταδένδρος.	....Ἔιθ' ὁ Νίκωνος· μεθ' ὃν, ποταμοὶ πλέιονες, καὶ ἄλλοι συνεχεῖς ὄρμοι, διηρημένοι κατὰ ϛαθμὺς καὶ δρόμους ἡμερησίως πλέιως, τὺς πάντας ἑπτὰ, μέχρι Πυραλάων Νήσων, καὶ τῆς Καινῆς λεγομένης Διώρυχος. Ἀφ' ἧς μικρὸν ἐπάνω τῦ Λιβὸς, μετὰ δύο δρόμως νυχθημέρως, παρ' ἀυτήν τὴν δύσιν ἤδη [ἔτι] νησίων, Μενυθεσίας ἀπαντᾷ Νῆσος, ϛαδίων ἀπὸ τῆς γῆς ὡσεὶ τριακοσίων, ταπεινὴ καὶ καταδένδρος.	....Next ſucceeds the anchorage of Nicon, and after that, ſeveral rivers and other anchorages in ſucceſſion, diſtributed into correſponding courſes of one day each, which amount to ſeven altogether, terminating at the Pyralaan iſlands, and the place called the new canal. From the new canal the courſe is not directly ſouth weſt, but ſomething more to the ſouth; and after two courſes of twenty-four hours [in this direction,] you meet with the iſland Menûtheſias, lying almoſt directly ſouth from the [Pyralaan] iſlands, at the diſtance of about thirty ſtadia from the continent. Menûtheſias itſelf is low and woody.

If the queſtion were now aſked, whether I am ſatisfied with this interpretation myſelf, I could not anſwer in the affirmative, for the ſenſe I wiſhed to obtain was, that Menûthias was the moſt ſouthernly of the Menûtheſian iſlands; and this fact I am not able to extract from any poſition of the words, or any reſtoration of the paſſage which I have to propoſe. I ſhall therefore only add ſome emendations of the paſſage propoſed by Dr. Charles Burney, who, however, ſtill doubts whether they ought to be deemed completely ſatisfactory. If his correction ſhould meet the opinion of the learned, I ſhall ſubſcribe without heſitation to his reſtoration of ἐπ' ἀνατολὴν for ἐπάνω τῦ Λιβὸς, and have little ſcruple in embracing his reading of

[56] Var. Lect. Πυριλάων. Baſil.
[57] Κὰι της καινῆς. Burney.
[58] Ἐπ' ἄνω. Baſ.
[59] Ἐπ' ἀνατολὴν. Burney.

παρ' αὐτὴν τὴν δύσιν διατείνουσα ἡ Μενουθίας, ... if δύσιν may be rendered SOUTH.

Obſervations by Dr. Charles Burney.

Περίπλους τῆς Ἐρυθρᾶς θαλάσσης. Edit. Princ. Baſileæ. *Quarto.* 1533. p. 20. l. 30.

1. Ὅρμοι, διῃρημένοι καθὰ σταθμοὺς καὶ δρόμους ἡμερησίους πλείους,
2. τοὺς πάντας ἑπτὰ, μέχρι πυριλάων νήσων, καινῆς λεγομένης διώρυχος.
3. ἀφ' ἧς μικρὸν ἐπ' ἄνω τὸ λιβὸς, μετὰ δύο δρόμους νυχθημέρους, παρ'
4. αὐτὴν τὴν δύσιν εἰλενηδιωμμενουθευσίας ἀπαντᾶ νῆσος ἀπὸ σταδίων τῆς
5. γῆς ὡσεὶ τριακοσίων, ταπεινὴ καὶ καλάδενδρος.

In editione Blancardi, Amſtel. 1683, in octavo, p. 151. l. 4—14.

L. 2. Πυριλάων. L. 3. Ἐπάνω.

L. 3. 4. Νυχθημέρες, παρ' αὐτὸ τὸ Πράσον ἄκρον εἰς ἕω Μενουθιὰς ἀπαντᾷ νησος, σταδίων ἀπὸ τ.

In editione Hudſoni, Geographiæ Vet. Scriptores Græci Minor. vol. i. p. 9. l. 26.—p. 10. l. 2.[60]

L. 2. Πυριλάων. L. 3. Ἐπάνω.

L. 4. 5. Σταδίων ἀπὸ τῆς.

L. 2. Μέχρι Πυριλάων νήσων, καινῆς λεγομένης διώρυχος.

It is ſurpriſing, that all the editors ſhould have paſſed over this paſſage, which is wholly unintelligible; nor will the ſuppoſition of

[60] The references in theſe remarks are made to Hudſon's edition.

τῆς

τῆς νήσου being underſtood, between μέχρι and Πυριλάων, remove the difficulty, of which you appear to have been the firſt obſerver. Καινὴ διώρυξ, as you remark, would, indeed, be an odd name for an iſland.

The article is improperly omitted, in the latter part of the ſentence. Hence the paſſage may be thus read:

Μέχρι Πυριλάων νήσων, καὶ τῆς καινῆς λεγομένης διώρυχος.

The word καινῆς has abſorbed καὶ τῆς, which might eaſily happen, from the ſimilarity of ſound, and accent on the final ῆς.

L. 3. ἀφ' ἧς μικρὸν ἐπάνω τῆ Λιβὸς, μετὰ δύο δρόμους νυχθημέρους, παρ' αὐλὴν τὴν δύσιν——

Ἐπάνω τοῦ Λιβὸς, on account of the intervention of μετὰ δ. δ. νυχθημέρους, cannot poſſibly be connected with παρ' αὐλὴν τὴν δύσιν, nor would theſe terms, if they could be united, explain the ſituation of the iſland Menûthias. Inſtead of ἐπάνω τοῦ λιβὸς, read, ἐπ' ἀναλολὴν, which preciſely expreſſes the poſition of Menûthias, with reſpect to the new canal, or ἡ καινὴ διώρυξ, on the coaſt of Africa.

To remove all doubt about the truth of the correction, the words of Ptolemy may be adduced:

Ὦ (ἀκρολιθρίῳ, τῷ Πράσῳ) παράκειται ἀπὸ θερινῶν ἀναλολῶν νῆσος, ἣ ὄνομα Μενουθίας, p. 131.

It may alſo be mentioned, that Λὶψ is the name of a wind; and not of the coaſt, over which *Africus* blows. What poſſible explanation

explanation then can be given to ἐπάνω τοῦ λιβος?—The terms θερινὰι τροπαὶ καὶ χειμερινὰι, in Aulus Gellius, ii. xxii. p. 210. edit. Conrad. may illuſtrate Ptolemy's ἀπὸ θερινῶν ἀναϱολῶν.

L. 4. Παϱ' αὐϱὴν τὴν δύσιν ἐϱενηδιωμμενουθευσίας ἀπανϱᾶ νῆσος ἀπὸ σϱαδίων τῆς γῆς ὡσεὶ τϱιακοσίων.

In the latter part of this portentous word, ἐϱενηδιωμμενυθευσίας, Salmaſius acutely diſcovered the name of the iſland Menûthias; but it is impoſſible to aſſent to his change of παϱ' αὐϱὴν τὴν δύσιν ἐϱενηδιωμ, into παϱ' αὐϱὸ τὸ Πϱάσον ἄκϱον ἐις ἕω. It does not appear, that the author of this Periplûs was acquainted with the Promontory of Praſum; and it is certain, that he never uſes ἐις ἕω, but ἐπὶ, ἐις, or πϱὸς, ἀναϱολὴν, for *Orientem verſus*. The new reading alſo does not ſufficiently reſemble the old, for it to have juſt claims to admiſſion.

Henricus Jacobius is ſtill more unfortunate in his conjecture—— δύσιν ἔις τι νότιον Μενουθιὰς α. νῆσος. This author, indeed, has, p. 27. l. 26. καὶ τὰ νότια τῆς Ἰνδικῆς——, but this will not vindicate ἔις τι νότιον, nor will καϱα τι δίκαιον ἀϱχᾶιον, *antiquo quodam jure*, in p. 10. l. 23. nor in p. 20. l. 3. ἡμέϱας δ' πολύ τι βλέπουϱες, if the paſſage be found, defend this uſage of τι with νοτιον. This author, indeed, has, p. 7. l. 34 ἐ ς τὸν νότον, and again, p. 9. l. 14. ſo p. 11. l. 16. καϱὰ τὸν νότον, and p. 12. l. 32. παϱ' αὐϱὸν νότον,—but τι νότιον is unexampled in this Periplûs.

As to ἓν τῶν νησίων Μενουθεσίων, or Μενιθεσίας ἀ. νῆσος, it is harſh to admit ἓν, and not agreeable to the uſage of the Periplûs.—Ἐστι νησίον Μενουθεσίας, would occaſion the omiſſion of two words, ἀπανϱᾶ νῆσος, as you obſerve; which would greatly invalidate the conjec-

ture, even if the following ταπεινὴ did not render it inadmiſſible.—It is right to ſtate, that the word νησίον occurs in this Periplûs, p. 22. l. 10. πρόκειται—αὐτῇ νησίον μικρόν.

Salmaſius appears, as has been mentioned, to have rightly traced the name Μενουθιὰς, in the latter part of this ſtrange word. In the former, ἐξενηδιωμ, ſeem to be diſcoverable the disjoined traces of διαξείνουσα ἡ. The letters are ſtrangely jumbled; but it is to be recollected, that in the very next line, where Hudſon gives σλαδίων ἀπὸ τῆς, the editio Princeps has ἀπὸ σλαδίων τῆς γ.

Let the author himſelf defend this reſtitution. Firſt, for διατείνουσα.

P. 5. l. 16. ἐπ' ἀναλολὴν—διαξείνει.

P. 6. l. 17, ἀκρωτηρίῳ τῷ ἐξ αναλολῆς ἀναξείνοντι, &c. &c.

To conclude, the whole paſſage ſhould probably be read thus:

Ὅρμοι, διηρημένοι καλὰ σλαθμοὺς καὶ δρόμους ἡμερησίους πλείους, τοὺς πάντας ἐπλὰ, μέχρι Πυριλάων νήσων, καὶ τῆς καινῆς λεγομένης διώρυχος· ἀφ' ἧς μικρὸν ἐπ' ἀναλολὴν, μελὰ δύο δρόμους νυχθημέρους, παρ' αὐτὴν τὴν δύσιν διαξείνουσα, ἡ Μενουθίας ἀπαντᾷ νῆσος, σλαδίων ἀπὸ τῆς γῆς ὡσεὶ τριακοσίων, ταπεινὴ καὶ καλάδενδρος.

No. IV.

Ancient Maps *of the* World.

THREE plates are here preſented to the obſervation of the reader, two of which are original, from Coſmas Indicopleuſtes, and Al Edriſſi, and the third is drawn up by Bertius, for the Variorum edition of Pomponius Mela, by Abraham Gronovius, 1722.

I. Pomponius Mela, as earlieſt in point of time, requires our conſideration firſt, and in this map it will be ſeen with what propriety the ancients called the extent of the earth, from weſt to eaſt, length, and the extent, from north to ſouth, breadth. Artemidorus[61] (104, A. C.) is ſaid by Pliny to have firſt employed the terms of length and breadth, or longitude and latitude. The dividing of theſe into degrees, and degrees into their parts, was not effected fully before the time of Marinus, nor brought into practice before Ptolemy. But our preſent inquiry is confined to the appearance of the earth, and here the great object which ſtrikes our attention is the vaſt ſouthern continent or hemiſphere, placed as it were[62] in counterbalance to the northern. The form in which it here appears ſeems as if the ancients had cut off the great triangle of Africa to the ſouth, and ſwelled it into another world in contradiſtinction to that which they knew and inhabited themſelves. It is this ſuppoſition which gives riſe to the expreſſions of Manilius.

[61] See Agathemeras, in Hudſon's Geog. Min. cap. iv. Strabo, lib. i. p. 64. Ptol. lib. i.

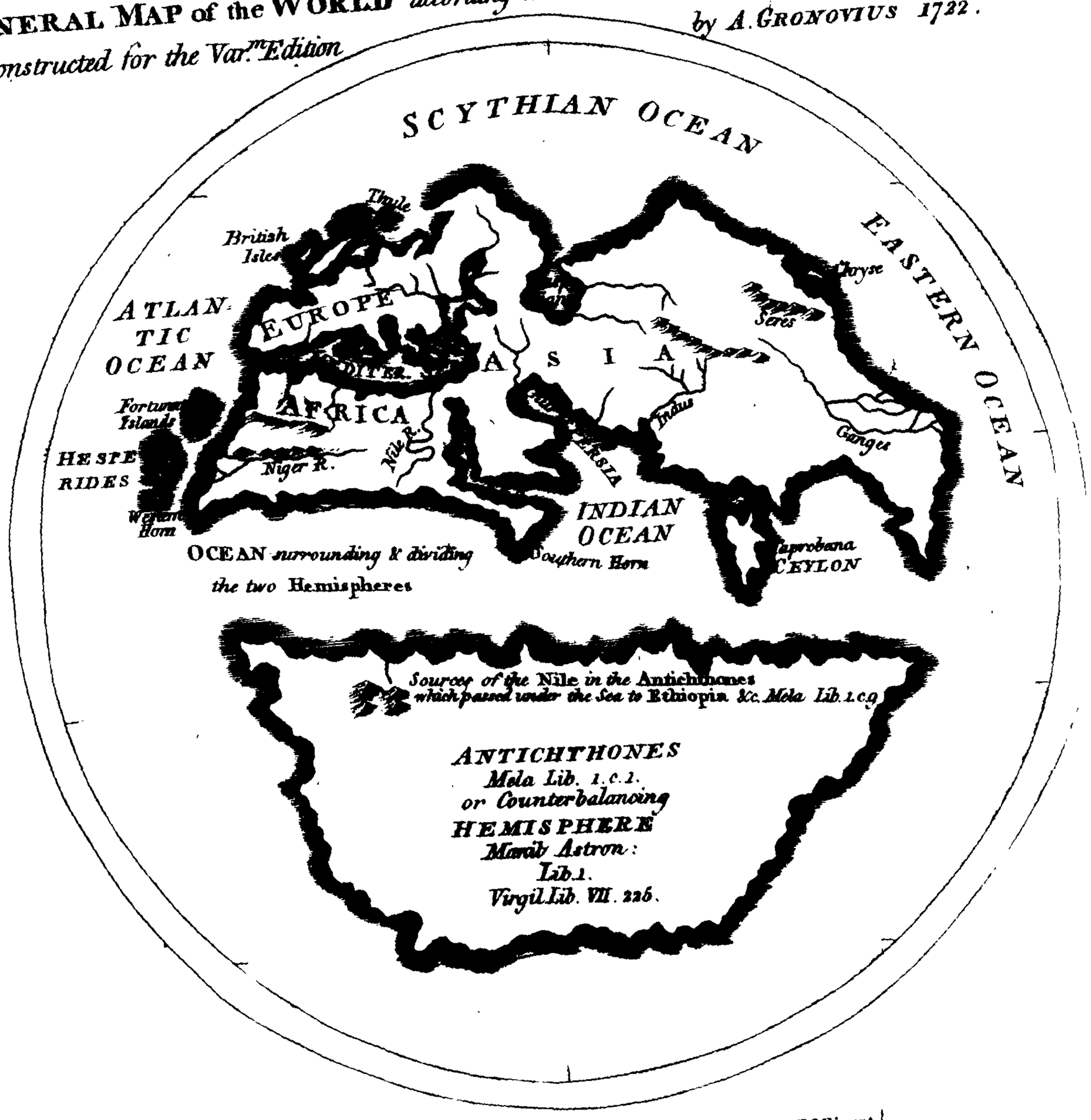
[62] Pom. Mela, lib. i. c. 1. See the map itſelf in Gronovius.

Altera

To front p. 80

GENERAL MAP of the WORLD *according to* POMPONIUS MELA *by* P. BERTIUS.

constructed for the Var.^m Edition *by* A. GRONOVIUS 1722.



Published according to Act of Parliament May 1st 1800. by D. Vincent

Altera pars orbis ſub aquis jacet invia nobis,
Ignotæque hominum gentes, nec tranſita regna
Commune ex uno lumen ducentia ſole,
Diverſaſque umbras, *lævâque* cadentia ſigna,
Et dextros ortus cælo ſpectantia verſo. ASTRON. lib. i.

And the ſame ſentiment in Virgil.

Audiit et ſi quem tellus extrema refuſo
Submovet oceano, et ſi quem extenta plagarum
Quatuor in medio dirimit plaga ſolis iniqui. ÆN. lib. vii. 226.

It is this ſuppoſition alſo which gave riſe to the belief of circumnavigations which never took place; for Mr. Goſſelin proves that the voyage of Eudoxus cuts through the centre of the great continent of Africa, and Hanno is carried to the Red Sea without paſſing the equator. This it is which extends the title of the Atlantick Ocean, to the eaſt of Africa as well as to the weſt, and makes Juba commence the Atlantick from Moſyllon. All this is natural, if the continent of Africa be curtailed at the twelfth degree of northern latitude, and the voyage ſhortened by about eighty degrees in extent.

But it may be proper to call the attention of the reader to the view of this ſort of a world, as applicable to the Phenician expedition of Herodotus. A veſſel ſailing along the ſouthern coaſt of ſuch an Africa as this, has in theory the ſun upon the right-hand of the navigators for three parts of the voyage, and this conſtitutes the circumſtance as the grand occurrence of the expedition. But were the ſame veſſel to run into latitude 34° ſouth, the real latitude of the Cape, the ſpace during which the ſun would be on the right-

hand, is a point in compariſon of the other courſe, and the phenomenon would doubtleſs have been pointed out in other terms, as the quarter of the heavens, or the place of the luminary.

There is another particular in this map alſo well worthy of attention, which is the ſource of the Nile placed in the ſouthern hemiſphere, and compelled to run under the ocean, like another Alpheus, and riſe again in Ethiopia; now this fable has its origin from one of two cauſes; for it was either known that this hypotheſis cut Africa too ſhort to afford a place for the ſources of the Nile, which were carried to an indefinite diſtance ſouth by the early geographers[63], and therefore a ſituation ſouth muſt be found beyond the ocean in the other hemiſphere, or elſe it aroſe from the report of the Nile in the early part of its courſe, running through a ſea with which it never mixes. This is a circumſtance which is now known to take place on its paſſing through the Lake Tzana or Dembea, where Bruce aſſures us that the courſe of the ſtream acroſs the lake is diſtinctly viſible from the high land in the neighbourhood.

Nothing farther worthy of obſervation occurs in this map, but that it cuts ſhort the peninſula of India as well as Africa, and places Taprόbana or Ceylon as it appears in the tables of Ptolemy. It unites alſo the Caſpian Sea with the ocean, and gives a circumambient ocean on the north, as navigable as on the ſouth, part of which the Argonauts did navigate! and all but the whole was ſuppoſed to have been navigated, by Pliny. It was this ſuppoſition which brought the Seres on the north, almoſt as nearly in contact with the Caſpian[64] Sea, as Moſyllon was with the Fortunate Iſles on the ſouth!

[63] To 12° or 13° ſouth by Ptolemy.

[64] See the concluding pages of the Periplûs.

MAP *of the* WORLD *taken from an* Arabian Manuscript *of* Al Edrisi *in the* Bodleian Library.

The Author lived in the 12.th Century the Manuscript is of the 15.th

NB. The Arabian Geographers represent the World as an Egg floating in a Bason of Water.



Published according to Act of Parliament May 1st 1800 by Dr Vincent

J Walker Sculp

how many obſtacles has real navigation diſcovered, which fictitious navigators ſurmounted without a difficulty?

II. The Map of Coſmas[65]

Is ſo poor a compoſition, and ſo wholly the conception of his own mind, that it would be utterly unworthy of notice were it not the original production of the monk himſelf. The veracity of Coſmas, both in regard to what he ſaw and heard, is reſpectable, as we ſhall ſhew hereafter in his account of Ceylon; but his hypotheſis, as may be ſeen, makes the world a parallelogram with a circumambient ocean, and the rivers of Paradiſe flowing on the outſide; while the viciſſitude of day and night is not cauſed by the revolution of the earth or the heavens, but by the ſun's diſk being obſcured by a mountain on the north. He alſo has a Caſpian Sea that joins the ocean, and a Nile that runs under the ocean, ſpringing from the Gihon of Paradiſe in another world. The ignorance of an individual is not aſtoniſhing in any age, but the ignorance of Coſmas is extraordinary in the ſixth century, when we muſt ſuppoſe the writings of Ptolemy would have been known to a monk of Egypt, and when that monk reſided ſome years within the tropick, and muſt have ſeen the ſun on the north as well as on the ſouth.

III. The Map of Al-Edriſſi.

I owe the knowledge of this map to the kindneſs of Dr. White the Arabick Profeſſor at Oxford; there are two Arabick[66] copies of

[65] See plate in the account of the Adulitick Inſcription.

[66] One of Graves's, No. 3837. Another of Pocock's, No. 375. Hejira, 906, A. D. 1500. It is from the laſt that this map is taken.

Al-Edriſſi in the Bodleian, and that from which the oppoſite map is taken is beautiful and adorned with maps for almoſt every chapter. This before us is a general one, curious becauſe it is evidently founded upon the error of Ptolemy, which carries the coaſt of Africa round to the eaſt, and forms a ſouthern continent totally excluding the circumnavigation into the Atlantick Ocean. The learned Hartman ſuppoſes that Al-Edriſſi's account goes as low as 26° 20′ 0″ ſouth, to the river Spirito Santo. It may be ſo, for Daguta is his laſt city, which is but three days ſail from Gaſta, and Gaſta is but one from Komr, the Iſland of the Moon, or Madagaſcar. (See Hartman's Al-Edriſſi, p. 113. et ſeqq.) This point and Wak Wak or Ouak Ouak ſeem to baffle explanation, and Hartman confeſſes he can find no room for the latter. But with all its fable, it is ſtill the kingdom of the Zinguis, (Hartm. p. 106.) and if ſo, it muſt be Benomotapa, which lies inland, and which Al-Edriſſi has ignorantly brought to the coaſt. It is, in ſhort, the termination of knowledge, which, with Arabians as well as Greeks, is always fabulous, and is by ſome of their writers placed in the Mare tenebroſum, or Sea of China, (p. 107. Bakai another Arabian.)

That the Komr of Al-Edriſſi, the Iſland of the Moon, is Madagaſcar I have no doubt; becauſe in the maps which detail the coaſt, I found the continuation of this iſland oppoſite to the continent through ſeveral chapters, in all which parcels, Dr. White aſſured me the name of Komr was regularly repeated; and though Hartman is by this made to doubt concerning Saranda, Serendib, or Ceylon, (p. 116. et ſeqq.) there is no ground for heſitation, the error originates with Ptolemy, and the neceſſity of carrying round the lower part of Africa to the eaſt, compels thoſe who follow his hypotheſis to throw

up

up Madagaſcar nearly oppoſite to Ceylon, to bring the Indus into the Gulph of Perſia, and the Ganges over the head of Ceylon. Whether all theſe inconſiſtencies would have appeared as groſs in detail as in the general map, I cannot ſay; my want of Oriental learning, I regretted, did not permit me to examine the MS. myſelf, in a ſatisfactory manner, and I had intruded too far on the aſſiſtance of the profeſſor. To judge by Madagaſcar and the coaſt of Africa, I ſtill think the ſearch would repay any Orientaliſt who would purſue it; and when Sir William Ouſely has finiſhed Ebn Haukel, what better ſcene for the employment of his ſuperior talents than Al-Edriſſi, whom we all quote from an imperfect tranſlation, and whom we ſhould know how to appreciate, if the droſs were once ſeparated from his ore.

The courſe of the Nile is ſtill more hyperbolical in this author than in Ptolemy whom he copies, but he has an inland Caſpian as well as that author, and of a better form. To compenſate this, however, he has his magnetick rocks which draw the iron out of veſſels, an eaſtern fable as regularly at the limit of Oriental knowledge, as Anthropophagi fixed the boundary of the Greeks; while his termination of the coaſt of Africa at Daguta wherever that may be fixed, proves that little more had been done by the Arabs of the twelfth century, towards proſecuting the diſcovery of the coaſt to the ſouth, than by thoſe whom the Greeks found there, or by the Greeks themſelves.

The Arabick names of this map, now ſupplied by cyphers, have been tranſlated by Captain Francklin of the Bengal Eſtabliſhment, whoſe merit as an Oriental ſcholar is ſufficiently eſtabliſhed by his Hiſtory of the Revolutions at Dehli, and who has repaid the inſtruction of his youth, with the cordiality of a friend.

Numbers

Numbers and Names of the Chart from the Arabick, by Captain Francklin.

No. 1. Mountains of the Moon, and fources of the Nile.
2. Berbara.
3. Al-Zung.
4. Sefala.
5. Al-Wak Wak.
6. Serendeeb (Ceylon).
7. Al-Comor (Madagaſcar).
8. Al-Dafi.
9. Al-Yemen (Arabia Felix).
10. Tehama.
11. Al-Hejaz (Arabia Deſerta).
12. Al-Shujur.
13. Al-Imama.
14. Al-Habeſh (Ethiopia).
15. Al-Nuba (Nubia).
16. Al-Tajdeen.
17. Al Bejah.
18. Al-Saueed (Upper Egypt).
19. Afouahat.
20. Gowaz.
21. Kanum.
22. Belad Al-Lemlum.
23. Belad Mufrada.
24. Belad Nemaneh.
25. Al-Mulita u Sinhajeh.
26. Curan (Karooan of Gibbon).
27. Negroland.
28. Al-Sous Nera.
29. Al-Mughrub Al-Amkeen.
30. Afreekeea (Africa).
31. Al-Hureed.
32. Seharee, Bereneek (or Deſart of Berenicè).
33. Miſſur (Egypt).
34. Al-Shâm (Syria).
35. Al-Irak.
36. Fars (Perſia Proper).
37. Kirman (Carmania).
38. Alfazeh.
39. Mughan.
40. Al-Sunda.
41. Al-Hind (India).
42. Al-Seen (China).
43. Khoraſan.
44. Al-Beharus.
45. Azerbijan

No. 45. Azerbijan (Media).
46. Khuwarizm.
47. Al-Shafh.
48. Khirkeez.
49. Al-Sefur.
50. Al-Tibut (Tibet).
51. Al-Nufuz Izz.
52. Kurjeea (Georgia).
53. Keymâk.
54. Kulhæa.
55. Izzea.
56. Azkufh.
57. Turkefh.
58. Iturâb.
59. Bulghar (Bulgaria).
60. Al Mutenah.
61. Yajooj (Gog).
62. Majooj (Magog).
63. Afiatic (Ruffia).
64. Bejeerut.
65. Al-Alman.
66. Al-Khuzzus (Caſpian Sea).
67. Turkea (Turkey).
68. Albeian (Albania).
69. Makeduneeah (Macedonia).
70. Baltic Sea.
71. Jenubea (probably Sweden).
72. Germania (Germany).
73. Denmark.
74. Afranfeeah (France).
75. Felowiah (Norway).
76. Burtea or Burtenea (Britain).
77. Corfica, Sardinia, &c.
78. Italy.
79. Afhkerineah (part of Spain).

THE END OF THE APPENDIX TO THE FIRST PART.

DIRECTIONS TO THE BINDER.

I. The Portrait of Vaſco de Gama to front the title page.
This portrait is taken from the Portugueſe manuſcript of Reſſende, in the Britiſh Muſeum, and by the account of Faria y Souſa, (vol. i. p. 281.) anſwers to the portrait of Gama, preſerved in the Viceroy's palace of Goa, where the portraits of all the Viceroys ſeem to have been placed. Faria writes thus: "He died upon Chriſtmas Eve, having been Viceroy three "months, was of a middle ſtature, ſomewhat groſs, of a ruddy complexion. "He is painted with a black cap, cloak and breeches, edged with velvet, "*all ſlaſhed*, through which appears the crimſon lining, the doublet of "crimſon ſattin, and over it his armour inlaid with gold." If this deſcription be from the portrait at Goa, we have here probably a drawing from the picture, as it correſponds in every particular except the ſlaſhes in the cloak.

II. Chart of the Red Sea, to front Book II. p. 69.

III. Chart of the Coaſt of Africa, to front p. 111.

IV. A drawing of Adûli and the Chair of Ptolemy, &c. In the bottom of the plate is a general plan of the World; both from the MS. of Coſmas Indicopleuſtes, publiſhed by Montfaucon, (tom i. p. 188. Nova Collectio Patrum,) to front the diſſertation on the Adulitick marble. Appendix, p. 50.

V. A general map of the world, conſtructed for Pomponius Mela, to front the account of ancient maps in the Appendix, p. 80.

VI. A general map of the world from an Arabick MS. (in the Bodleian Library) of Al-Edriſſi, commonly called the Nubian Geographer; this map to front, p. 83. Appendix.

ERRATA.

ERRATA.

Page 3. line 2. *for* work *read* journal
10. note 7. *for* Ὅμηρος *read* Ὅμηρος
15. line ult. *dele* only
25. — 7. *for* Agatharcides *read* Agatharchides
32. note 61. *for* וסְבָאִים *read* וסְבָאִים
47. note 84. *for* γεννώμεινος *read* γεννώμενος
48. note 85. *for* Ὄζαανα *read* ὄζαινα
58. note 108. *for* τοιάτανώς *read* τοιάτων ὡς
69. N° XII. *after Acannai insert* Arômata
79. note 30. *for* Μυὸς Ὄρμος *read* Μυὸς ὅρμος
84. line 4. *for* that is from Berenícè *read* that is, lies 4000 ſtadia from Berenícè
penult. *for* Hbeſh *read* Habeſh
98. note 73. *for* Turanta *read* Taranta
28. note 74. *after* fifteen *add* days
125. line 14. *for* Tepara *read* Ta-pera
130. — 11. *for* 11° 30′ d'Anville *read* 11° 45′ d'Anville
135. — 15. *for* Morro Cabir *read* Morro Cobir
140. — 7. *for* Aden *read* Adea
175. — 2. *for* Necho *read* Neco
196. — 8. *for* 1525 *read* 1521
197. note 323. *for* paſſare ne mari, de ponente *read* paſſare ne mare de ponente
202. line 2. *for* map and chart *read* map or chart
223. — 2. *after* time *inſert* it
10. *for* other tribe *read* other, a tribe

APPENDIX.

24. *for* Coſtus Corticoſus bark, Coſtus *read* Coſtus Corticoſus, bark Coſtus
31. line 5. *for* Calleau *read* Callean
62. note 46. line 2. *dele*, that

At pp. 43. 47. 61. and 98. Hadramant is printed for Hadramaut.

P. 100. note 79. Ψαμμήτιχος παρείχετο φορτία πᾶσι τοῖς ἐμπόροις μάλιστα δὲ τοῖς Φοίνιξι καὶ Ἕλλησι ought to have been printed at the end of the firſt book.

P. 74. note 11. the note ought to be eraſed.

P. 126. note 147. the error improperly imputed to Mr. Goſſelin is corrected p. 136.

P. 28 note 51. *add* the Hyena is ſaid to imitate the human voice, by Buſbequius. Eng. ed. p. 79.

P. 86. note 48. ιω is printed for ιυ, and υ is in many MSS. the character of beta (as in Mr. Townley's MS. of Homer, &c. &c.); it was eaſy to turn this υ of the MSS. into α. Hence the fluctuation in Ptolemy of ια and ιϛ. which ought always to be ιυ or ιϛ, which are both the ſame, and anſwer to one twelfth, or five minutes the twelfth of ſixty.

Printed by A. Strahan, Printers Street, London.

CHART of the RED SEA

Copied by Mr Dalrymples permission from the CHART by Robt White

1795

NB the line of Coast above is taken from Mr Dalrymples Chart the names of places and all other parts of the work are from different authorities, and accommodated to the PERIPLUS

Names of the Periplus in Roman letters

Modern names in Italicks

Places supposed to be ascertained have an Asterisk

N B The Arabs count to the South as the right hand & the North as the left consequently Towards the Right Hand & Arabs the South are synonymous.

Published according to Act of Parliament May 1st 1800 by W Vincent

From the Author

THE

PERIPLUS

OF THE

ERYTHREAN SEA.

PART THE SECOND.

THE

PERIPLUS

OF THE

ERYTHREAN SEA.

PART THE SECOND.

CONTAINING,

AN ACCOUNT OF

THE NAVIGATION OF THE ANCIENTS,

FROM THE GULPH OF ELANA, IN THE RED SEA,

TO THE ISLAND OF CEYLON.

WITH DISSERTATIONS.

BY WILLIAM VINCENT, D.D.

Γράφω δὲ ταῦτα, πολλοῖς μὲν ἐντυχὼν ΠΕΡΙΠΛΟΙΣ, πολὺν δὲ περὶ τὴν τούτων ἴδησιν ἀναλώσας χρόνον.

MARCIANUS HERACLEOTA, apud HUDSONUM, p. 62.

LONDON:

PRINTED FOR T. CADELL AND W. DAVIES, IN THE STRAND.

1805.

TO

THE KING.

SIR,

WHEN I was honoured with permiſſion to dedicate the former part of this Work to Your Majeſty, I entertained little hope that the remainder would be brought to a concluſion. But the conſequences of Your Majeſty's condeſcenſion in my favour have been leiſure, tranquillity, and health. In poſſeſſion of theſe bleſſings, I returned naturally to thoſe purſuits

ſuits which have enabled me to fulfil my engagement to the Public. Impreſſed therefore, as I am, with a ſenſe of the moſt devoted gratitude, nothing remains for me to ſolicit, but the continuance of the ſame protection to the completion, as I experienced at the commencement of the Work. And if it ſhall appear that the plan has been formed with judgment, and executed with fidelity, no farther qualification will be neceſſary to recommend it to the conſideration and patronage of Your Majeſty.

I have the honour to ſubſcribe myſelf

YOUR MAJESTY's

Moſt obedient,

moſt faithful,

humble Servant, and Subject,

JUNE, 1805.

WILLIAM VINCENT.

PREFACE.

WHETHER the following Work will afford a degree of ſatisfaction proportionate to the labour of compiling it, is a queſtion not for the Author, but for others to decide. By ſome it may be thought digreſſive, tedious, and minute; while others may conceive that there are various ſources of information ſtill unexplored, which it was my duty to inveſtigate. To the firſt I reply, that I thought nothing ſuperfluous which could contribute to the elucidation of the ſubject propoſed; and in anſwer to the latter I may obſerve, that there muſt be ſome limits aſſigned to collection and reſearch. It is the office of judgment to ſelect only ſuch materials as will bear upon the point to be diſcuſſed; and for the exerciſe of this judgment, I now ſtand amenable to the tribunal

tribunal of the Public. Friendly animadverſions upon the errors which may occur, I ſhall conſider, not as a cauſe of offence, but as the means of correction; and of remarks proceeding from a contrary ſpirit, I have hitherto had little reaſon to complain. But if the Work which I now ſubmit to the inſpection of the Public, ſhould not obtain the ſame favourable reception as I have experienced upon former occaſions, it ſhall be my laſt offence. In the ſixty-ſixth year of my age, it is time to withdraw from all my purſuits of curioſity, and confine myſelf to the duties of my profeſſion.

ADVER-

ADVERTISEMENT.

THE account of Marco Polo's Map, given (Part I. p. 201.) from Ramuſio, is not correct; for it has ſince appeared, that the Map in the church of St. Michael di Murano, is not Marco Polo's, but drawn up by Fra Mauro, a geographer at Venice; and is the Map copied for Prince Henry of Portugal.

A Fac Simile of this Map has been taken, and is expected in England every day; when it arrives, a ſhort account of it will be given, and delivered gratis to the purchaſers of this work.

The Map of Marco Polo's Travels is in the Doge's Palace at Venice, and was framed from that of Fra Mauro.

I AM to acknowledge my obligations to Mr. Dalrymple, in regard to the preſent publication, in the ſame manner as upon former occaſions: I was, by his kindneſs, furniſhed with Surveys of the Harbours and Iſlands on the Coaſt of Malabar, which have been of great uſe.

And to Mr. A. Hamilton, of Edinburgh, editor of a Sanſkreet Dictionary, I have been indebted for the Interpretation of Sanſkreet Names on the ſame coaſt. This favour was the more acceptable, as I was known to that Gentleman only by my publications; and his offer of aſſiſtance was ſpontaneous.

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CONTAINING

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THE

THE

PERIPLUS

OF THE

ERYTHREAN SEA.

ARABIA.

BOOK III.

I. *Introduction.*—II. *Leukè Komè.*—III. *Petra, Kingdom of Iduméa, Nabathéans.*—IV. *Voyages diſtinguiſhable in the Periplús.*—V. *The Compaſs.*—VI. *Wealth of Arabia.*—VII. *Thamudeni and Canraites.*—VIII. *Burnt Iſland, Mooſa, Coaſt of Yemen.*—IX. *Expedition of Elius Gallus.*—X. *Straits of Babel Mandeb, ancient Navigation of Seſoſtris.*—XI. *Aden.*—XII. *Arrangement of the Coaſt of Arabia on the Ocean.*—XIII. *Kanè.*—XIV. *Bay Sachalites, Hadramaut.*—XV. *Dioſkorida, or Socotra.*—XVI. *Moſkha and Omana.*—XVII. *Iſlands of Zenobius, or Curia Muria.*—XVIII. *Sarápis, or Mazeira.*—XIX. *Iſlands of Kalaius, or Suadi.*—XX. *Iſlands of Papias.*—XXI. *Sabo, Aſſabo, or Moçandon.*—XXII. *Terédon, Apólogus, or Oboleh.*—XXIII. *Oriental Commerce by the Gulph of Perſia.*—XXIV. *Cairo.*—XXV. *Cruſades.*—XXVI. *Gerrha.*—XXVII. *Minéans.*—XXVIII. *Antiquity of Oriental Commerce.*—XXIX. *Concluſion.*

I. THE commerce of the Ancients between Egypt and the coaſt of Africa, with all that concerns their diſcoveries to the South, has been traced in the preceding pages; and we now return

again to Egypt, in order to take a freſh departure, and proſecute our inquiries till we reach their final boundary on the Eaſt. The preſent Book will comprize all that concerns the commerce of Arabia, both in the interior, and on the coaſt.

The Periplûs is ſtill to form the baſis of our inveſtigation; but as the object propoſed is to give a general account of the communication with the Eaſt, no apology is requiſite for detaining the reader from the immediate contemplation of the work itſelf. A variety of ſcattered materials, all centring at the ſame point, are to be collected, before a comprehenſive view can be preſented, or an accurate judgment formed; and if this taſk can be executed with the fidelity and attention which the nature of the ſubject requires, the general reſult will be preferable to the detail of a ſingle voyage, in the ſame proportion as a whole is ſuperior to its parts.

The commencement, then, of this ſecond Voyage is again from Bereníkè, and from this port there were two routes practiſed in the age of the author; one, down the gulph to Mooza and Okêlis direct, and the other, firſt up to Myos Hormus, and then acroſs the gulph by the promontory Pharan, or Cape Mahomed, to Leukè Komè in Arabia. This latter route is the immediate object of our conſideration.

LEUKÈ KOMÈ.

II. LEUKÈ KOMÈ, or the White Village, I ſhall place nearly at the Mouth of the bay of Acaba, the Elanitick Gulph of the ancients [1]; and

[1] A comparative table, containing the different diſtribution of the ancient names, by M. d'Anville and M. Goſſellin, will be given hereafter; and I muſt mention once for all, that when

and my reaſons for aſſuming this poſition will be given at large in their proper place. But to this village we are immediately directed by the journal, after a paſſage of two or three days from Myos Hormus; for here, we are informed, "was the point of commu-
"nication with Petra the capital of the country, the reſidence of
"Malichas the king of the Nabatêans. Leukè Komè itſelf had the
"rank of a mart in reſpect to the ſmall veſſels which obtained[1]
"their cargoes in Arabia; for which reaſon there was a garriſon
"placed in it under the command of a centurion, both for the
"purpoſe of protection, and in order to collect a duty of twenty-
"five in the hundred[2]" [upon the exports and imports].

We obtain, in theſe few words, a variety of particulars highly important to the ſubject of our conſideration; for we find a native king under the controul of the Romans, a duty levied upon the trade of the natives, and the nature of the communication between the port and the capital. And if we now reflect that the intercourſe with the capital was rather fixed here, at the mouth of the Elanitick gulph, than either at Elana itſelf, or at Ezion Geber, we ſhall diſcover the ſame principle as operated on the Egyptian coaſt, where the communication was fixed at Myos Hormus rather than Arſinoè, or at Bereníkè in preference to Myos Hormus.

when I make uſe of M. Goſſellin's Reſearches without mentioning his name, it is not to deprive him of the honour of his diſcoveries, but becauſe it muſt occur ſo frequently that the repetition would be offenſive. I had traced this coaſt many years before the publication of M. Goſſellin's Recherches ſur la Geographie des Anciens, 2 tomes, Paris 1798; and though he precedes me in publication, I will not apply to him the old complaint, male ſit illis qui ante nos noſtra dixerunt.

[1] ἐξαρτιζομένοις; literally, fitted out.

[2] In Albuquerque's time, the ſoldan of Egypt received cuſtom upon ſpices, and other commodities, at Judda, in the ſame manner as the Romans had formerly received them at Leukè Komè. Commentar. de A. d'Albuquerque, p. iv. c. 7.

In the age of the Periplûs, as this courſe was the leſs frequented of the two, ſo is it apparent that the commerce itſelf was of leſs importance; the veſſels employed are Arabian, and the duty ſeems collected on them only: poſſibly the ſhips, which touched here after croſſing from Myos Hormus, had paid the cuſtoms in that port, and made this harbour chiefly for the purpoſe of accommodation, or of aſcertaining their route down the coaſt of Arabia.

Very different is the idea that I conceive of this trade while the communication with Egypt was in the hands of the Arabians themſelves, previous to the appearance of Ptólemy's fleets upon the Red Sea, and their immediate communication with Sabêa; for the caravans, in all ages, from Minêa[4] in the interior of Arabia, and from Gerrha on the gulph of Perſia, from Hadramaut on the ocean, and ſome even from Sabêa or Yemen, appear to have pointed to Petra, as a common centre; and from Petra the trade ſeems to have been again branched out in every direction to Egypt, Paleſtine, and Syria, through Arſinoè, Gaza, Tyre, Jeruſalem, Damaſcus, and a variety of ſubordinate routes that all terminated on the Mediterranean.

It is not conſonant to the deſign of this work to enter into any commerce antecedent to hiſtory; but from analogy, from the magnificence recorded of Ninevè and Babylon, from the ruins of Thebes ſtill remaining, there is every reaſon to ſuppoſe that the wealth and power of theſe great cities aroſe from a participation in this commerce; and that the Arabians were the carriers common to them all.

[4] The poſition of the Minêi is dubious: Bochart ſuppoſes them to be in the vicinity of Hadramaut; Goſſellin places them two days from Mecca, tom. ii. p. 116.; Strabo places Carana of the Minéans next to the Sabêans, p. 768.

This is a fact which will admit of proof as ſoon as hiſtory commences; but we may pauſe a moment to obſerve, that though the Chaldêans and Aſſyrians might have been navigators themſelves, as the gulph of Perſia opened a communication for them with the Indian Ocean, and their works at Babylon and Teredon intimate ſome attention to the advantages of a naval power; ſtill the Indians[5], Perſians, and Egyptians, ſeem to have been reſtrained by prejudices, either political or religious, from diſtant navigation; and though Perſia and Egypt manifeſtly reaped the profits of an Oriental commerce which paſſed through theſe countries to others more diſtant, either on the north or on the weſt, ſtill the common centre was Arabia[6]: the Arabians had no obſtructions either from manners, laws, habits, or religion; and as there is every proof that is requiſite, to ſhew that the Tyrians and Sidonians were the firſt merchants who introduced the produce of India to all the nations which encircled the Mediterranean, ſo is there the ſtrongeſt evidence to prove, that the Tyrians[7] obtained all theſe commodities from Arabia.

[5] The religion of India forbids the natives to paſs the Attock: it is the *forbidden* river. And if their religion was the ſame formerly as it is now, they could not go to ſea; for even thoſe who navigate the rivers muſt always eat on land.—The Perſians, if their religion was that of Zerduſht, could not go to ſea; for the Guebres, who build the fineſt ſhips in the world at Bombay, muſt never navigate them. The Egyptians did not only abhor the ſea themſelves, but all thoſe likewiſe that uſed it. Goſſellin Recherches, tom. ii. p. 96. Diod. lib. i. p. 78. See alſo Marco Polo, lib. iii. c. 20. Ed. Ramuſio: quello che bee vino non ſi riceve per teſtimonio, ne quello che naviga per mare.

Linſchotin in Purchas, vol. iii. p. 1765. writes, "the Abexiins [Abyſſinians] and Arabians, ſuch as are free, do ſerve in all India for faylers or ſeafaring-men."

[6] Plin. lib. vi. c. 28. Arabes in univerſum gentes ditiſſimæ, ut apud quas maxime opes Romanorum Parthorumque ſubſidant, vendentibus quæ a mari aut ſylvis capiant, nihil invicem redimentibus.

[7] See Herodotus, who ſays the name of Cinnamon is from the Phenicians.

PETRA. KINGDOM OF IDUMÊA. NABATHÊANS.

III. But if Arabia was the centre of this commerce, Petra [8] was the point to which all the Arabians tended from the three ſides of their vaſt peninſula [9]: here, upon opening the oldeſt hiſtory in the world, we find the Iſhmaelites, from Gilead, conducting a caravan of camels loaded with the ſpices [10] of India, the balſam and myrrh of Hadramaut; and in the regular courſe of their traffic, proceeding to Egypt [11] for a market. The date of this tranſaction is more than ſeventeen centuries prior to the Chriſtian era; and, notwithſtanding its antiquity, it has all the genuine features of a caravan croſſing the Deſert at the preſent hour.

It is this conſideration, above all others, which makes the Petra we have arrived at with the Periplûs, an object the moſt worthy of our curioſity; for Petra is the capital of Edom or Seir, the Idumêa or Arabia Petrêa of the Greeks, the Nabatêa, conſidered both by geographers, hiſtorians, and poets, as the ſource of all the precious commodities of the eaſt. And as Idumêa is derived from Edom, or

[8] Agatharchides Hudſ. p. 57. Πέτραν καὶ τὴν Παλαιστίνην . . . . . ἐις ἣν Γερραῖοι καὶ Μιναῖοι, καὶ πάντες ὁι πλησίον ἔχοντες τὰς οἰκήσεις Ἄραβες, τὸν τε Λιβανωτὸν, ὡς λόγος, καὶ τὰ φορτία τὰ πρὸς ἰνδίαν ἀνήκοντά, ἀπὸ τῆς χώρης τῆς ἄνω καταγεσιν. And Pliny, lib. vi. c. 28.: huc convenit bivium eorum qui Syriæ Palmyram petiere et eorum qui ab Gaza veniunt. And again: in Paſitigris ripa, Forath, in quod a Petra conveniunt.

[9] The ſea coaſt of Arabia is more than 3,500 miles.

[10] In the thirteenth chapter of Exodus the ſpices of India, and the gums and odours of Arabia, are mentioned by name; and it is not aſſuming too much to ſuppoſe, that the ſpices here mentioned are from India alſo: the term uſed is נכאת, Necoth, which ſignifies any thing bruiſed or brayed in a mortar, as ſpices are reduced in order to uſe them with our food. צרי, Tſeri, is a gum or balſam; and לט, Lot, is the ſame, evidently marking the produce of Arabia. See Parkhurſt in voce. See alſo Gen. xxv. 18.; and Cumberland's Origin of Nations, p. 210.

[11] Geneſis, xxxvii. 25.

Eſau

Eſau the ſon of Iſaac, ſo is Nabatêa deduced from Nebaioth the ſon of Iſhmael; and Eſau married Baſhemath [12], the ſiſter of Nebaioth. Little reſpect as has been paid to the genealogies [13] of the ſcripture by ſome writers of the preſent day, it is ſtill to be conſidered that the Bible may be tried by the rule of hiſtory as well as inſpiration, and that the traditions of the Arabians are in harmony with the writings of Moſes; for they as univerſally acknowledge [14] Joktan, the fourth from Shem, as the origin of thoſe tribes which occupied Sabêa and Hadramaut, that is, Yemen and the incenſe country; and Iſhmael the ſon of Abraham, as the father of the families that ſettled in Hejaz, which is Arabia Deſerta; as they do Edom for the anceſtor of the Idumêans, who occupied Arabia Petrêa. Theſe form the three [15] general diviſions of this vaſt country and nation, as extraordinary for the preſervation of its manners, as its liberty; and which is continuing at this day to fulfil one of thoſe prophecies which aſſure us of the truth of that Hiſtory in which theſe families are recorded.

The name of this capital, in all the various languages in which it occurs, implies a rock [16], and as ſuch it is deſcribed in the Scriptures, in Strabo, and Al Edriſi; but it is a rock ſupplied with an abundant

[12] Gen. xxxvi. 3.

[13] See Gibbon, vol. v. p. 179. note 21. and p. 197.

[14] Gen. x. 26, 27. the ſon of Joctan. Hazarmaveth is equivalent to Hadzrmauth, or Hadramaut.

[15] The Arabians divide their country into five, taking in Oman and the eaſtern ſide, under the name of Aronda or Jemama, and making a diſtinct part of the Tehamaor country below the mountains. See Reiſke Ind. Geog. in Alfilfedam.

[16] Thomud gives a name to the Thamydeni of the Greeks in this neighbourhood, and is ſufficiently acknowledged by the Oriental writers. The ſprings of Thomud might give riſe to a river, which Pliny mentions, lib. vi. c. 18. and which d'Anville carries into the Lake Aſphaltis.

ſpring of water, ſtyled Thomud [17] by the Nubian, which gives it a diſtinction from all the rocks in its vicinity, and conſtitutes it a fortreſs of importance in the Deſert. Strabo did not viſit it himſelf, but deſcribes it from the account of his friend Athenodôrus the philoſopher. Athenodôrus ſpoke with great admiration of the people, their civilized manners and quiet diſpoſition. The government was regal; but it was the cuſtom for the ſovereign to name a miniſter [18], who had the title of the king's brother, in whoſe hands the whole of the power [19] ſeemed chiefly to reſide: ſuch a miniſter (or vizir, as we ſhould now call him) was Syllêus in the reign of Obodas and Aretas, who makes ſo conſpicuous a figure in the hiſtory of Joſephus, and who was tried and executed at Rome, according to Strabo, for his treachery to Elius Gallus.

[17] The names are,

Rekam; Numbers, xxxi. 8. Joſhua, xiii. 21. Bochart. Canaan, lib. i. c. 44.
Rakim.
Rokom.
Rekemè.
A Rekemè; quæ Græcis vocatur Petra. Joſephus.
Arkè. Joſephus.
Sela; from סֶלַע, a rock Heb.
Hagar, a rock. Arab^ck Herbelot in voce,
חַר, Har. Heb.
Arak, Karak, Krak de Montreal. Cruſaders.
Petra, a Rock Greek.
The Rock, pre eminently. Jerem xlix. 16. See Blaney in loco.

But ſee Schultens (Index Geog. ad vitam Saladini), where he informs us that Hagar and Krak are not Petra, though in the neighbourhood. Petra, he ſays, is Errakym, the ſame as the Rekeme or Rakim of Joſephus. See Voc. Caraccha, Errakimum, Sjaubech, ibid. The miſtake of one for the other he imputes to Bernard. Theſaurarius de Acquiſit. Terræ Sanctæ, xxii 2. 5 It is in lat. 31° 30′ 0″ Abiilfeda. Which, if true, makes it no more than 87 miles from Aila, which he places in 29° 8′ 0″; but Schultens ſays, Petra is in 2[illegible]° 30′ 0″ from Abilfeda; if ſo, it is only 5 Roman miles from Aila. Carak is mentioned as well as Hagjr, by Abilfeda, Reiſke. p. 43, where the Moſlems were defeated in their firſt conflict with the Romans.

In the route from Gaza to Karak there are ſtill the ruins of thirty villages, and remains of buildings, pillars, &c. indicating the former wealth of the country Volney Syria, p. 212.

[18] ἐπιτροπὸς, as literally a *vizir* as it can be rendered.

[19] Joſephus Antiq. xvi. p. 734.

Moſes

Moſes was forbidden to moleſt the ſons of Edom in his paſſage through the wilderneſs; but that there was then a conſiderable commerce in the country we have reaſon to conclude, from the conqueſt of Midian [20], in its neighbourhood, by Gideon [21], not many years after; when gold is deſcribed as abundant among the Midianites, and their wealth in camels a proof of the traffic by which they ſubſiſted. In the reign of David, Hadad [22] the prince of Edom was driven out, and Hebrew garriſons were placed in Elath and Ezion Geber, where Prideaux ſuppoſes that David commenced the trade of Ophir [23], which was afterwards carried to its height by Solomon.

And here, perhaps, it will be expected that the trade to Ophir ſhould be examined, which has ſo much divided the opinions of mankind, from the time of Jerom to the preſent moment; but as I have nothing deciſive to offer upon the queſtion, I ſhall only ſtate my reaſons for acceding to the opinion of Prideaux and Goſſellin, who confine it to Sabêa.

For I neither carry Ophir to Peru with Arias Montanus, or to Malacca with Joſephus, or to Ceylon with Bochart, becauſe I conſider all theſe ſuppoſitions as founded upon no better evidence than the finding of gold in thoſe countries; but our choice muſt lie be-

[20] Midian is the country of Jethro, on the Elanitick Gulph, called Madien by the Arabs, and Jethro, Scioaib Al Edriſi, p. 109.

[21] Judges, viii. 24. the people are called Iſhmaelites. Gideon for his reward demanded the ear rings of the men, and the chains on the camels' necks: the decoration beſpeaks the value of the animal.

[22] Hadad fled into Egypt for protection, a proof of the connection between the two countries; and his marriage with Pharaoh's daughter proves his rank and eſtimation. 1 Kings, xi. 19. He attempted to recover Edom in the latter end of Solomon's reign.

[23] David had treaſured up three thouſand talents of the gold of Ophir, 1 Chron. xxix. 4.; but this does not prove the voyage, for the gold of Ophir was a common expreſſion. See Job, xxii. 24. xxvi. 16. Pſalms, &c. &c. lxv. 9. See Prideaux's Connections, p. 4.

tween the coaſt of Africa and Sabêa. Monteſquieu, Bruce, and d'Anville, have determined in favour of Africa, principally, I think, becauſe gold has always been an export from that country, while the precious metals were uſually carried to Sabêa, to purchaſe the commodities of the eaſt. I allow great weight to this argument; and I admit the probability of d'Anville's ſuppoſition, that the Ophir of Arabia might naturally produce an Ophir on the coaſt of Africa, which ſhould, by an eaſy etymology, paſs into Sophir, Sophar, Sopharah el Zange, or Sophala: but I by no means ſubſcribe to the ſyſtem of Bruce, which he has diſplayed with ſo much learning and ingenuity; and which he thinks eſtabliſhed by the diſcovery of an anomalous monſoon prevailing from Sofala to Melinda. A ſenſible [24] writer has denied the exiſtence of any ſuch irregularity, and appeals to Halley [25], Parkinſon, and Forreſt; and if the irregular monſoon is annihilated, nothing remains in favour of his hypotheſis but the

[24] In the Gentleman's Magazine, 1793, p. 222.

[25] Halley's account is to be found in the Philoſophical Tranſactions, 1686, p. 153; in which he ſays, that in the ſouth-weſt monſoon the winds are generally more ſoutherly on the African ſide, and more weſterly on the Indian. So far he is directly adverſe to Bruce's ſyſtem; but he adds, that near the African coaſt, between it and the Iſland of Madagaſcar, and thence to the northward as far as the line, from April to October there is found a conſtant freſh S.S.W. wind, which, as you go more northerly, becomes ſtill more weſterly. What winds blow in theſe ſeas during the other half year, from October to April, is not eaſy to learn, becauſe navigators always return from India without Madagaſcar: *the only account obtained, was, that the winds are much eaſterly hereabouts, and as often to the north of the true eaſt, as to the ſouthward of it.*

The laſt ſentence is all that Bruce has to build his anomalous monſoon on; and it does not prove an anomalous monſoon, but a fluctuation in the regular one.

"The weſt winds begin the firſt of April "at Socotora; the eaſtern monſoon the 13th "of October, continues till April, then fair "weather till May. Neither have they more "than two monſoons yearly: weſt monſoon "blows at Socotora all ſouth; eaſt monſoon, "all north. After the 25th of September "ſhips cannot depart from the Red Sea eaſtward." Purchas, vol. ii. 193, Keeling's Voyage.

duration

duration [26] of the voyage. The duration it ſhould ſeem eaſy to account for, upon a different principle; for the navigators were Phenicians, and we learn from Homer [27] their method of conducting buſineſs in a foreign port. They had no factors to whom they could conſign a cargo in the groſs, or who could furniſh them, on the emergence, with a lading in return; but they anchored in a harbour, where they were their own brokers, and diſpoſed of their cargoes by retail. This might detain them for a twelvemonth, as it did in the inſtance to which I allude; and if the Phenicians traded on the Eaſtern Ocean, as they did in the Mediterranean, we may from this cauſe aſſign any duration to the voyage which the hiſtory requires.

But my reaſons for adhering to the opinions of Prideaux and Goſſellin are, firſt, that Ophir is mentioned [28] with Havilah and Jobab, all three ſons of Joktan; and all of them, as well as Joktan, have their reſidence in Arabia Felix, moſt probably beyond the Straits; and ſecondly, becauſe the voyage to Ophir ſeems in conſequence of the viſit of the queen of Sheba to Jeruſalem: it is immediately ſubjoined [29] to it in the ſame chapter; and Sheba is Sabêa [30], or Arabia Felix, as we learn with certainty from Ezekiel [31]. It is particularly added,

[26] Pliny, on a much ſhorter diſtance, that is, from Azania to Ocila or Okêlis, makes the voyage five years. Lib. xii. 19.

[27] Odyſſey, o. 454.

[28] Geneſis, x. 29.

[29] 1 Kings, x. 10, 11. See Goſſellin Recherches, tom. ii. p. 121. and Volney, Syria, p. 170.

[30] Coſmas Indicopleuſtes ſuppoſes the queen of Sheba to be the queen of the Homerites; that is, in his age, the Homerites were maſters of Sabêa. He gives a very rational account of the trade of theſe Homerites, or Sabêans rather, with Africa, for the ſpices which the queen of Sheba brought; their intercourſe with the Red Sea, Perſia and India, and Zingium or Zanguebar; with the gold obtained thence by the Abyſſinians, and brought into Arabia, as it is to this day. See Coſmas in Melch. Thevenot, vol. i. p. 7.

[31] Ezek. xxvii. 22. "The merchants of "Sheba and Raamah, they were thy mer-"chants:

added, that the royal viſitant brought a preſent of ſpices: "there were no ſuch ſpices as the queen [32] of Sheba gave to Solomon."

I do not wiſh to conceal an objection to this ſuppoſition; which is, though they are taxed, that ſpices are never mentioned as an article of importation from Ophir. The produce of the voyage is gold, ſilver, ivory, almug-trees [33], apes, peacocks, and precious ſtones. But as on the one hand this failure in the invoice will argue much more forcibly againſt any of the more diſtant Ophirs which have been aſſumed; ſo on the other, it is no proof againſt Sabêa, that ſeveral of theſe articles are not native; for theſe, and many more than are enumerated, would certainly be found in Sabêa, if the Arabians were navigators in that age, as we have every reaſon to ſuppoſe they were.

The evidence that Solomon obtained gold from Arabia is expreſs; and as our early authorities notice gold as a native produce among the Debæ [34] of Hejaz, ſo may we conclude that the gold of Africa always found its way into Yemen through Abyſſinia, as it does at this day. The import of gold, therefore, we carry up as high as the reign of Solomon; and bring it down to the time of Ptolemy Philadelphus, king of Egypt; for we learn, from the teſtimony of Ezekiel and Ariſteas [35], that ſpices, precious ſtones, and

"chants: they occupied in thy fairs [marts] "with chief of all ſpices, and with all pre- "cious ſtones and gold." In this paſſage the introduction of gold *from* Arabia is ſpecific, and the three articles are the ſame as they continued to be in the reign of Ptolemy Philadelphus. See Ariſteas.

[32] 2 Chron. ix. 9. from Goſſellin.

[33] Almug and Algum are both read in ſcripture; and Shaw, p. 42. cites the opinion of Hiller, in his Hierophyticon, that אגל גמים, Agal Gummim, is, liquidorum guttæ gum. But in ſcripture the wood does not appear to be brought for its gum, but for uſe; and muſical inſtruments were made of it, 1 Kings, x. 12., as Shaw obſerves, who ſuppoſes it to be cypreſs, ſtill uſed by the Italians for that purpoſe. See 2 Chron. ix. 21.

[34] Deb is ſaid to ſignify gold, in Arabick. All the kings of Arabia brought gold and ſilver to Solomon. 2 Chron. ix. 14.

[35] Περὶ δ' Ἰαπόδος καὶ τῶν ἀρωμάτων καὶ λίθων τολιτελῶν,

and gold, were brought by the Arabians[36] into Judea. I do not wiſh to lay more ſtreſs upon this teſtimony than it will bear; but it is not unreaſonable to ſuppoſe, that the circumſtances of this commerce were ſimilar, in an early age, to thoſe of a later period. The removal of theſe difficulties will ſhew the inducement which perſuades me to join in opinion with Prideaux and Goſſellin, upon a queſtion that has been more embarraſſed by hypotheſis, and diſtracted by erudition, than any other which concerns the commerce of the ancients.

The participation of Hiram in this concern is founded upon neceſſity as well as policy; for if Solomon was maſter of Idumêa, the Tyrians were cut off from Arabia, unleſs they united with the poſſeſſors; and whatever profit Solomon might derive from the import, the whole of the export on the Mediterranean would be to the excluſive emolument of Tyre. Here the Greeks found the commodities of the eaſt, or received them in their own ports from the hands of the Phenicians; for they were not allowed to enter the harbours of Egypt till the reign of Pſammetichus; and the very

πολυτελῶν καὶ ΧΡΥΣΟΥ παραχομίζεται διὰ τῶν Ἀράβων εἰς τὸν τόπον. Ariſteas, p. 40. Ed. Wells, Oxon. 1692. If Ariſteas is not good evidence for the Septuagint verſion, his teſtimony may be taken for the tranſactions of the age in which he lived. I imagine this to be the ſame commerce as is noticed by Strabo (lib. xvi. p. 81.), where we learn that the Tyrians traded through Rhinocolúra to Petra and Leukè Komè. Harris (vol i. p. 379) ſuppoſes the Tyrians to be maſters of Rhinocolura; which knowledge he ſeems to draw from Prideaux (Con. part ii. p. 6. & part i. p. 7.): but if it depends on the paſſage of Strabo, it does not follow that the Tyrians were maſters of the place, however their trade paſſed through it. But Rhinocolúra, by its ſituation on the limits of Phenicia and Egypt, was certainly adapted in a peculiar manner for keeping open the communication. Prideaux's account of Idumêa and this trade (part i. p. 17.) is highly accurate and comprehenſive; but we have no date of the fact recorded by Strabo.

[3] διὰ τῶν Ἀράβων, perhaps, through the country of the Arabians. Agatharchides is alſo an evidence in favour of the exportation of gold from Arabia: ἅτοι πολλὴν τὴν Ἰτολιμαΐδα Συρίαν ποιήκασιν, p. 64.

names of the articles they obtained were derived from the Phenicians, as we are informed by Herodotus [37].

The poſſeſſion of Idumêa by the kings of Judah continued little more than an hundred years, to the reign of Jehoram, when the Idumêans revolted [38], and were not again ſubdued till after an interval of eighty years, in the reign of Uzziah [39]. Seventy years after this, the Syrians [40] ſeized upon Elath; and here terminates the trade of Ophir, in regard to Iſrael; and probably in regard to Tyre, with the capture of that city, about an hundred and ſixty years later, by Nebuchadnezzar.

Whether Nebuchadnezzar over-ran Idumêa, is a queſtion that hiſtory [41] has not reſolved; or whether he beſieged Tyre with any view of opening a communication with the Mediterranean, is equally unknown; but that he had ſome plan of commerce on the gulph of Perſia in contemplation, we may judge from a curious fragment of Abydenus [42], which informs us, that he raiſed a mound or wall to confine

[37] Τὸ δὲ δὴ κιννάμωμον ἔτι τούτων θωυμαστότερον συλλέγουσι· ὅκου μὲν γὰρ γίνεται, καὶ ὅτις μιν γῆ ἡ τρέφουσά ἐστι, οὐκ ἔχουσι εἰπεῖν. . . . . ὄρνιθας δὲ λέγουσι μεγάλας φορέειν ταῦτα τὰ κάρφεα, Τὸ ἡμεῖς ἀπὸ Φοινίκων μαθόντες κιννάμωμον καλέομεν, lib. iii. p. 253.

"The cinnamon is ſtill more extraordinary; "for where it grows, or what country pro- "duces it, they cannot ſay; only the report "is, that birds bring the little rolls of the "bark which we, from the Phenicians, call "cinnamon." Herodotus ſuppoſes it, indeed, to come from the country where Dionyſus, or Bacchus, was born, that is, India; though there is a fable that he was born in Sabêa: but its progreſs is clearly marked through Arabia to Tyre, and thence into Greece with its Tyrian name.

[38] 2 Kings, viii. 22.

[39] 2 Kings, xiv. 22.

[40] 2 Kings, xvi. 6.

[41] It is highly probable, from the woe of Edom in the 49th chapter of Jeremiah.

[42] Scaliger Emend. Temp. Fragm. p. 13.

Ναβυχοδονόσορος . . . . . τόν τε Αρμακάλην ποταμὸν ἐξήγαγεν ἰόντα κέρας Εὐφράτου . . . . . ἐπιτείχισι δὲ καὶ τῆς Ερυθρῆς θαλάσσης τὴν ἐπίκλυσιν. καὶ Τριδόνα πόλιν ἔκτισε κατὰ τὰς Αράβων ἐσβολάς.

There ſeems alſo to be another canal mentioned by the name of Akrakanus, and a baſon above the city of the Sipparerians; and that theſe were all formed with a commercial view,

we

confine the waters at the mouth of the Tigris [43]; that he built the city of Terédon, to ſtop the incurſions of the Arabs; and opened the Naharmalca in Babylonia, which unites the Tigris with the Euphrates. Theſe tranſactions may lead us to ſuppoſe that this conqueror would turn his attention to Idumêa, and the gulph of Arabia, as well as to the Perſian Gulph and Tyre; and if he did, the conqueſt would have been eaſy, either when he was in Judêa, or during his march into Egypt.

From this time till the death of Alexander we have no account of Idumêa; but ſoon after that event, we meet with two expeditions of Antigonus directed againſt Petra; one under Athenêus [44], and another by his ſon Demétrius. Both had an unfortunate termination; but the country was ſtill haraſſed by the rival ſovereigns of Syria and Egypt, experiencing the ſame fate as Judêa, from its ſimilar ſituation between both, ſometimes ſubjected, and ſometimes free; till there aroſe a dynaſty at Petra, parallel to the Maccabees at Jeruſalem; and, like them, partly independent and partly under the influence of the more powerful monarchies on either ſide.

we may judge by what Arrian ſays of Teredon: "that it was, when Nearchus arrived "there, the mart to which the merchants "brought their libanon, and other odorife-"rous drugs, from Arabia." Arrian, lib. viii. p. 357. Διρίδωτις, ... ἵνα λιβανωτόν τε ἀπὸ τῆς ἐμπορίης γῆς ἐς ἔμποροι ἀγινέουσι, καὶ τὰ ἄλλα ὅσα θυμιήματα ἡ Ἀράβων γῆ φέρει. This (ἐμπορίη γῆ) mercantile country may be ſuppoſed equivalent to Grane; and the whole correſponds with the traffic which now exiſts between Grane and Baſra; ſo conſtant is the nature of this commerce, from the time of Nebuchadnezzar to the preſent hour. Have we not therefore a right to aſſume it in ages antecedent to the Babylonian monarchy? The continuance of it in after-times we learn from Nearchus, Strabo, &c.; and when Trajan was here, in the Parthian war, he ſaw a veſſel ſetting ſail for India, which excited in his mind the remembrance of Alexander, and a deſire of invading India, if he had not been ſo far advanced in years.—Xiphilinus in Trajano.

[43] It is called the inundation of the Erythrean Sea, and is in reality at Alphadana, in the mouth of the Shat el Arab; in which neighbourhood mounds of this ſort are ſtill preſerved. See Voyage of Nearchus, p. 436.

[44] Diodorus, lib. xix. p. 391.

I give

I give the following catalogue of Sovereigns, as well as I have been able to collect it from Josephus, without vouching for the correctness of the extract, or supposing the list to be complete; but such as it is, it will elucidate the commerce which has been proved to exist in this country, and bring the history of it down to the period when the Romans obtained an influence in the government, and the command of the coast; in which state it was found by the Author of the Periplûs:

Years before Christ.	
309. 308.	The two expeditions of Antigonus into Idumêa, as nearly as we can state them, were undertaken in the years before our era, 309 and 308.
144.	Malchus[45]—is the first king of Idumêa at Petra, mentioned by Josephus (Antiq. p. 569. Hudson's ed^{n}, and the 1 Maccabees, xi. 39.): he is styled Simalcue; and had protected Antiochus VI. restored to the throne of Syria, in 144, by Diódotus, called Tryphon.
126.	Aretas—assisted the city of Gaza besieged by Alexander Sebína, about the year 126. (Josephus Antiq. 595.)

[45] Mek, Melek, Malik (Arab^{ck}), are all from מֶלֶךְ, a king (Heb^{w}). In regard to Aretas, see Josephus, lib. xiv. cap. 2 4. and lib i cap. 6 Bel. Jud. where he mentions the conduct of Aretas in regard to Hyrcanus and Aristobúlus. See also the Universal Hist. vol vii. fol ed. Pliny, vi 28. Strabo, Diodor. iii. 516. an 730. Trajan in Arabia, Dio. xviii. 777. And Severus. Dio in Trajano, 948.

Theophanes, p. 124. mentions an Arethas, anno 49 · 556. 558, p. 207.

Perhaps every one of these princes was styled Malchus, or Malichus, *the* King. but Darius is a proper name, though Data is said to signify King, Emperor, or Royal. Si Malcue is some corruption or other of Malchus. Aretas is the Greek form of El Haretsch, as Antipater is of Antipas. El Haretsch occurs often. Mahomet married the daughter of an El Haretsch. Abulfeda. Reiske, p. 43.

Obodas

Years before Christ.

O'bodas [46]—is either the same as A'retas, or his successor within the year: he defeated Alexander about the

125. year 125. (Josephus Antiq. 596.)

A'retas II.—is the king to whom Hyrcanus, of the family of the Maccabees, high priest and king of Judêa, fled, when driven out by Aristobúlus. A'retas restored him with an army of 50,000 men, about the time that Pompey came to Damascus in

63. the Mithridatic war, in the year 63. In this reign commenced the connection of the Maccabees with Antipas, or Antipater, the Idumêan, and the father of Herod, which terminated in the destruction of the whole family. (Josephus Antiq. 608, 609.) Pompey took Petra (Dio, Latin copy, p. 23.); and from that Period the kings of Idumêa were, like the other kings in alliance with Rome, dependant, obliged to furnish auxiliaries on demand, and not allowed to assume the sovereignty without permission of the senate, and afterwards of the emperors. The interval between O'bodas and this A'retas I have not been able to fill up.

Malchus II.—must have commenced his reign before

47. the year 47; because in that year Cesar was at Alexandria, and Malchus is mentioned by Hirtius as one of the allied kings to whom Cesar sent for succours. (De Bello Alexandrino, p. 1. Hudson.

[46] O'bodas is written Obéidas by Strabo, And O'bedas by others. It seems to be the same name as Abudah, familiar to every ear as an Arabian name

Years before Chriſt.

Periplus, p. 11.) This Malchus[47] was in Judêa when the Parthians took Jeruſalem, and reſtored Antigonus; at which time Herod fled to Petra. (Joſephus Antiq. 644.) The Parthians were de-

39. feated by Ventidius in the year 39 (Dion Caſſius, Lat. p. 235.); and Malchus was ſtill king in 30 (Joſephus Antiq. 648. 677.); and he is ſtyled Malichus by Joſephus. (Bel. Jud. 990.)

O'bodas II.—muſt have commenced his reign before the

24. year 24; becauſe in that year Elius Gallus invaded Arabia, attended by Syllêus, miniſter of O'bodas and Syllêus, was tried at Rome and executed for his treachery, according to Strabo (p. 783.); but Joſephus ſays, on account of charges brought againſt him by Herod, whoſe cauſe was pleaded by Nicolaus of Damaſcus. This trial did not take place till the reign of the ſucceſſor of O'bodas. (Joſ. Antiq. 728, et ſeq.)

A'retas III.—ſeized the throne on the death of O'bodas,

12. about the year 12, without applying to Rome for the conſent of the emperor (Joſ. Antiq. 736.); and by that act incurred the diſpleaſure of Auguſtus, which however he appeaſed. The trial of Syllêus took place in this reign, who was accuſed of poiſoning O'bodas, and attempting the life of A'retas, among the other charges brought againſt him. This A'retas, or another of the ſame name, was on the

[47] He was fined by Ventidius. Dio, lib. xlviii. 234. Lat. ed.

throne

Years after Chriſt. 36.

throne as late as the year 36 after Chriſt, which is the laſt year of Tiberius; for Vitellius, proconſul of Syria, was preparing to march into Idumêa, but was ſtopped by that event. (Joſ. Antiq. 728. 736. 755.) It is in this reign we may place the viſit of Strabo's friend, Athenodórus, to Petra, who found it, as deſcribed above, in a civilized and flouriſhing ſtate.

A'retas IV.—whether another, or the ſame as the laſt, is dubious.

Much diſappointment have I felt in not being able to diſcover any ſucceſſor to A'retas, in Joſephus or Dion Caſſius; becauſe I have great reaſon to believe, that in his immediate ſucceſſor, or in the following reign, we ſhould have found another Malchus, or Malichus, the ſame who is mentioned by the Periplûs as the ſovereign of Petrêa, when the author frequented the port of Leukè Komè. We learn, however, from this brief account, the commencement of the Roman influence over this government under Pompey, and the continuance of it till the death of Tiberius; and it will hence appear very evident, how a Roman garriſon was introduced into Leukè Komè, and the revenues of the port diverted from the poſſeſſion of the native kings into the Roman treaſury. The immediate date of that tranſaction I cannot fix; for Elius Gallus appears to have had little knowledge of Leukè Komè till he was conducted[48] thither by Syllêus; and, as he returned from

[48] But he ſtaid there all the latter part of the ſummer, and the winter, Strab. xvii. p. 781. ſo that he might well leave a garriſon there at his departure.

another port, he had not the opportunity of leaving a garriſon at this harbour before he embarked. This makes it highly probable that the introduction of this garriſon was in the reign of Claudius, who evidently collected a revenue from the coaſt of Arabia, as we learn from the circumſtances related by Plócamus, and might well commence his ſyſtem from the head of the gulph.

It may be here obſerved, that the princes of this dynaſty at Petra are almoſt univerſally called kings of the Nabatêans by the hiſtorians; and the prevalence of this tribe of Nebaioth over the Idumêans is placed by Prideaux [49], with his uſual accuracy, during the Babyloniſh captivity, agreeing admirably with the exiſtence of their ſovereignty in the reign of Antigonus, and countenanced by Strabo [50], who mentions the expulſion of the Idumêans. If this, therefore, be the origin of the dynaſty, its termination is in the reign of Trajan, when Petrêa was reduced into the form of a Roman province [51] by Palma [52], his lieutenant [53]. Still, under the

[49] Prideaux, Con. vol. i. p 9.; vol. ii. p. 155.

[50] Strabo, lib. xvi. p. 760.

[51] Under the name of Palæſtina Tertia; there is a coin of Adrian's.

[52] See Xiphilinus Ed. Baſil. p. 553. in Trajano, who mentions likewiſe, p. 557. that Palma was afterwards put to death by Adrian.

[53] It is evident that the Roman power was never very firm in this province, at leaſt under the latter empire; for Juſtinian was obliged to ſubdue it after a conſiderable lapſe of independence; and Procopius, Cedrénus, and Theóphanes, conſtantly notice an A'rethas, either at Petra or in Iduméa, who was conſidered as an Arab ſovereign in the Roman intereſt, in oppoſition to an Al Mondar under the protection of Perſia. The ſeat of this Al Mondar was at Hira, on the Bahr Nedjeff, a lake near the Euphrates [ſee d'Anville's Map of the Euphr. and Tigris]; and theſe Arabian powers ſeem uſually to have been ſet in motion by the Romans and Perſians, whenever a war was about to commence between the two empires. See Theóphanes Byz Hiſt. p. 496. Univerſ. Hiſt. p. 272. fol. ed. which ſays, A'retas is Al Hareth. O'bodas, Abd Wad. Theóphanes expreſsly mentions the defeat of an A'rethas, and the reſtoration of the tribute, or cuſtom, on India goods, anno 27, Anaſtaſii, that is, the year 488. See alſo the year 556, p. 203. where an A'rethas, the ſheik appointed by the Romans, complains of the Perſian ſheik Abar, ſon of Al Mondar; another A'rethas, was with Beliſarius in Iſauria. Procop. Hiſt. Arcan. p. 8.

latter empire, we meet with an Aretas in Procópius; and poſſibly, according to the fluctuating power of the empire, it was at times ſubject, and again independent, according to the change of circumſtances, till it was finally reduced by Mahomed in perſon. This is a fact ſo ſingular that, as I ſhall make it the termination of my inquiries, the reader will pardon a digreſſion that is foreign to the ſubject. For Mahomed marched againſt this country with an army of thirty thouſand men, of which one-third was cavalry: he took Hagjr [54], the capital of the Tſchamudites [55]; and John, the prefect of Aila [56], ſubmitted to pay a tribute of three hundred pieces of gold [57]. Now if Hagjr be not the Hagar of the Hebrews, the Petra of the Greeks, it is at leaſt a hill fort in the ſame country, and maintained the ſame rank as the ſeat of government. Aila is the Elath of the ſcriptures, ſtill at that period under the power of Conſtantinople (if we may judge from the name of John the governor), ſo late as the reign of Heraclius. This expedition is the more remarkable, as it is the firſt ſucceſsful attempt of the Mahomedans beyond the limits of the Hejaz [58], and the prelude to the conqueſt of Syria by

[54] See note 17.

[55] The Thamydeni of the Greeks.

[56] Abilfeda Reiſke, p. 52.

[57] Trecentos nummos aureos. If it is the Roman aureus, the value varied, according to Arbuthnot, from 1*l.* 4*s.* 3¾*d.* to 16*s.* 1¾*d.*, which admits a medium of twenty ſhillings. Aila was no longer the port of the trade of Ophir.

[58] See Gibbon, vol. v. p. 245. The ſuperſtition of a bigot never went to greater exceſs in defence of his faith, than the fanaticiſm of philoſophy has carried Gibbon, in ſoftening the vices, cruelty, hypocriſy, and impoſture, of Mahomet, or in amplifying his courage, his eloquence, and abilities as a ſtateſman or a general; but at the ſame time, notwithſtanding this defect (which is radical), and notwithſtanding the deteſtable compariſons which he inſinuates, the extent of his reſearch, the uſe, ſelection, and arrangement of his materials, form one of the moſt brilliant ſpecimens of his talents as an hiſtorian. In regard to this laſt tranſaction of Mahomet, I apprehend Gibbon is miſtaken: he ſays, the prophet received the ſubmiſſion of the tribes from the Euphrates to the Red Sea; but according to Abilfeda, he ſubdued Hagjr and Aila only; and

by the immediate ſucceſſor of the prophet. This expedition, therefore, it was, which opened the way to all their ſucceeding victories over the declining power of the Romans in the eaſt.

This account of Arabia Petrêa, from the time of the Patriarchs to the riſe of the Mahomedan power, is eſſentially connected with the object of the preſent work; becauſe the whole commerce of the eaſt originally paſſed through this province to Phenicia, Tyre, and Egypt; for the Minêans, who were the conductors of the caravans from Sabêa to Hadramaut, and the Gerrhêans from the gulph of Perſia, both pointed to this centre; and notwithſtanding that the caravans decreaſed in proportion to the advance of navigation, ſtill Petra was a capital of conſideration in the age of the Periplûs: there was ſtill a proportion of the trade paſſed from Leukè Komè to this city, and its princes maintained a rank ſimilar to that of Herod in Judêa. In all the ſubſequent fluctuations of power, ſome commercial tranſactions [59] are diſcoverable in this province; and if Egypt ſhould ever be under a civilized government again, Petrêa would be no longer a deſert.

Whether the Idumêans had been navigators previous to the time of Solomon and Hiram; and whether thoſe princes occupied the ports of Idumêa in order to turn this navigation to their own advantage, or were the firſt to venture on it themſelves, muſt be a matter of conjecture; but that the Arabians of this province, or more probably of thoſe farther to the ſouth, were the firſt navigators whom hiſtory mentions, upon the Indian Ocean, is evident: firſt,

and if the tribute was no more than 300 aurei, the conqueſt was of importance only as it opened the road to Syria. See Abilfeda, Reiſke, Lipſiæ, 1754, p. 52.

[50] Γάζην τόμιον . . . . . τῆς ἐρήμου κατὰ τὸ Σίναιον ὄρος πλουσίαν σφόδρα. Cedrenus, 429.

Gaza, the key of the deſert of Sina, a country *very rich*.

from

from Nearchus [60], who found the traces of it on the coaſt of Gadroſia; and, ſecondly, from Agathárchides, who diſtinctly mentions the great ſhips in the ports of Sabêa which traded to India; and if the works of Eratoſthenes [61] were extant, we ſhould learn how the Greeks obtained their knowledge to the eaſt of Cape Comorin, before any fleets had ſailed from Egypt beyond the Straits of Bab-el-mandeb.

But whatever previous ſources of information we might trace, it is from the Periplûs itſelf that we can diſcover no leſs than ſix different courſes of the ancients in theſe ſeas, all prior to the age of the author, or practiſed by different navigators at the time he wrote.

IV. VOYAGES DISTINGUISHABLE IN THE PERIPLÛS.

I. THE firſt is the voyage, deſcribed in the two previous books, down the coaſt of Africa to Rhaptum; ſhewing that the Arabians had ſettlements in that country, before it was viſited by the Greeks from Egypt.

[60] He found Arabick names of places, a pilot to direct him, and veſſels of the country, at Apoſtani, in the gulph of Perſia. See Voyage of Nearchus, p. 351.

[61] Marcian of Heraclea informs us, that Eratoſthenes took the whole work of Timoſthenes, preface and all, as it ſtood, and in the very ſame words: this confirms an opinion that I have already ventured to give, that Eratoſthenes was more of a geometrician than a geographer. Marcian, indeed, does not ſpeak very highly of Timoſthenes, and yet, by this account, it ſhould ſeem that Eratoſthenes's knowledge of the Thinæ was from Timoſthenes, who had commanded the fleet of Ptolemy Philadelphus on the Indian Ocean, and had gone farther down the coaſt of Africa than any other Greek of his age. See Marcian in Hudſon, p. 64: he calls him Ἀρχινυβερνήτης τῷ δευτέρῳ Πτολεμαίου. Strabo ſtyles him Ναυαρχος. See Pliny, Hardouin, p. 132. Marcian mentions likewiſe Sofander, a pilot, who wrote on India. Still there is an obſcure knowledge of the Thinæ, and the Golden Cherſoneſe, prior to all theſe geographers, as appears from the Treatiſe de Mundo in Ariſtotle, if that be a genuine work of the philoſopher.

II. Secondly,

II.[62] Secondly, we are informed of the two diſtinct courſes within the Gulph: one from Myos Hormus, acroſs the head of the gulph to Leukè Komè, and thence down the Arabian coaſt to Mooza; and another, from Bereníkè to the ſame port direct.

III.[63] Next to this, we collect a voyage from the mouth of the Straits along the ſouthern coaſt of Arabia into the gulph of Perſia, extending afterwards to Bahrein, El Katif, and Oboleh, in the Shat-el-Arab.

IV.[64] Then follows a paſſage from the Straits to India by three different routes: the firſt, by adhering to the coaſts of Arabia, Karmánia, Gadróſia, and Scindi, to the gulph of Cambay; the ſecond, from Cape Fartaque, or from Ras-el-had, on the Arabian ſide; and the third, from Cape Gardefan, on the African ſide, both acroſs the ocean by the monſoon to Muzíris, on the coaſt of Malabar.

V.[65] After this, we muſt allow of a ſimilar voyage performed by the Indians to Arabia, or, by the Arabians to India, previous to the performance of it by the Greeks; becauſe the Greeks, as late as the reign of Philométer, met this commerce in Sabêa.

VI.[66] And laſtly, we obtain an incidental knowledge of a voyage which confirms all that has been advanced concerning the early commerce of the Arabians, previous, in all appearance, to every account we receive from the Greeks, and conducted, certainly, by the monſoon, long before Hippalus introduced the knowledge of that wind to the Roman world.

[62] Periplûs, pp. 12. 14.
[63] Periplûs, pp. 19, 20.
[64] Periplûs, pp. 20, 21, 22, 32. 33.
[65] Agatharchides apud Hudſon, pp. 64. 66.
[66] Periplûs, pp. 8, 9.

It is the voyage between the oppoſite coaſts of India and Africa, connected certainly with the commerce of Arabia, but ſtill capable of being conſidered in the abſtract, and proving, in my opinion at leaſt, the poſſible exiſtence of this intercourſe in ages antecedent to all that hiſtory can reach. If it could be believed that the natives of India had been navigators in any age, we might more readily admit their claim in this inſtance than in any other; for the author mentions, that the imports into Africa are the production of the interior, from Barugáza and Aríakè; that is, from the coaſt of Cambay and Concan: and the articles ſpecified confirm the truth of his aſſertion; for they are, rice[67], ghee, oil of ſeſamum, cotton, muſlins, ſaſhes, and ſugar: theſe commodities, he adds, are brought ſometimes in veſſels deſtined expreſsly for the coaſt of Africa; at other times, they are only a part of the cargo out of veſſels which are proceeding to another port. Thus we have manifeſtly two methods of conducting this commerce, perfectly diſtinct: one, to Africa direct; and another, by touching on this coaſt, with a final deſtination to Arabia. This is preciſely the ſame trade as the Portugueſe found at Melinda and Quiloa, and the ſame connection with Arabia; and this is the reaſon that the Greeks found cinnamon, and the produce of India, on this coaſt, when they firſt ventured to paſs the Straits[68], in order to ſeek a cheaper market than Sabêa.

[67] Periplûs, p. 9.
σῖτος, Wheat.
ὄρυζα, Rice.
βούτυρον Butter, *i. e.* Ghee.
ἔλαιον σησάμινον, Oil of Seſamum.
ὀθόνιον { ἡ μονάχη, Cotton Cloths, Muſlin. / ἡ σαγματογήνη, Cotton in the Wool, for ſtuffing Beds, &c.
περιζώματα, Saſhes.
μέλι τὸ καλάμινον, τὸ λεγόμενον σάκχαρι, } Sugar.

[68] The paſſing of theſe ſtraits is aſcribed to Seſoſtris by Heródotus and Diodôrus, which, if the whole hiſtory of Seſoſtris be a fable, is ſtill a proof that Heródotus knew ſome object was to be obtained by the attempt. He adds

Sabêa. Still it muſt be doubted, whether this commerce was conducted by natives of India, or Arabians; for Arabians there were on the coaſt of Malabar, and in ſuch numbers at Ceylon, that Pliny [69] repreſents them as maſters of the coaſt, like the Europeans

(lib. ii. p. 109.), that Seſoſtris advanced into the Erythrêan Sea till he was ſtopped by ſhoals; a proof to me, that he entered the Bay Avalites, and went no farther. But Diodôrus (lib. i. p. 64.) carries him by ſea to India, and by land, to the eaſtern coaſt of China: ſo little trouble does it coſt an hiſtorian to convey his hero to the world's end, when he is not embarraſſed with circumſtances. If any date could be affixed to the reign of Seſoſtris, if his conqueſts could be reconciled with the hiſtory of the nations he is ſaid to have conquered, I ſhould think it highly probable that he knew of an Indian commerce in Arabia, or Africa, and wiſhed to partake of it; and even as the fact ſtands, it appears as if Heródotus was fully juſtified in ſuppoſing, that ſome attempts had been made by the Egyptians to enter the Erythrêan Sea. But the Egyptians ſeem to have attributed all their wonders to Seſoſtris, as the Greeks did theirs to Hercules; and it is as difficult to reconcile the date of his reign to reaſon, as the chronology of the Egyptians to ſcripture. The truly learned and moſt excellent tranſlator of Heródotus profeſſes his belief in ſcripture, and deprecates all concluſions againſt the ſcriptures which may be drawn from his chronology: it is a proteſt of importance, becauſe his firſt date makes the eſtabliſhment of Egypt 13,560 years, and the building of Memphis 8,352 years prior to the creation, according to the Moſaical account; and it is not without a ſenſe of the contradiction that we read the following words: "Il eſt donc conſtant

" que notre hiſtorien a été le fidèle interprete " des prêtres Egyptiens, & *qu'il n'y avoit pas* " *la plus légere incoherence dans leur recits.*" Chronol. Herod. p. 222. 1ſt edit. But M. Larcher will not now be averſe to ſee theſe prieſts convicted of an incoherence, which is, an interval of near eleven thouſand years between the building of the Temple of Ptha by Menes, and the adding a propylèum to it by Moeris. This is about a duplicate of the abſurdity which would ſtrike the mind of an Engliſhman, if he were told that the dome of St. Paul's was built by Adam, and the portico added by Q. Anne.

Since the time that theſe obſervations were made, we have another edition of Heródotus by the ſame excellent tranſlator, who, in the 76th year of his age, repeats his belief in the ſcriptures, and recalls every thing in his works that may ſeem of a contrary tendency to the hiſtory they contain. I rejoice in the addition of ſuch a name to the catalogue of believers; I admire the fortitude that inſpired the profeſſion, and I truſt that the example will be efficacious in recalling others to the truth.

[69] Pliny, lib. vi. c. 22. Regi, cultum liberi patris, cæteris, Arabum; that is, the king retained the native worſhip of the Indian Bacchus, above the Ghauts; while the inhabitants on the coaſt were Arabians, or had embraced the ſuperſtition of the Arabians.

The Portugueſe made a Chriſtian king of Candy; but the Dutch and Engliſh have been leſs zealous for their faith than the Arabians, either when Idolators or Mahometans.

of

of the preſent day, who have confined the native ſovereigns to the country above the Ghauts, and have poſſeſſed themſelves of the level towards the ſea; ſuch alſo was their ſituation, though under the name of Moors, or Mahometans, when the modern Europeans met with them again upon their arrival at Calicut, where their influence over the native government long counteracted all the power of the Portugueſe.

Theſe are the reaſons which induce a ſuppoſition, that the whole of this intercourſe, on both ſides, was in the hands of the Arabians [70]; but it muſt be left to the determination of thoſe who have been reſident in India, how far the ſuperſtition of Braminiſm deſcends to the Parias, the lower caſts, or thoſe who have loſt all caſt, ſo as to permit or forbid their venturing on the ocean. That there was an ulterior commerce [71] beyond Ceylon, is indubitable; for at Ceylon the trade from Malacca and the Golden Cherſoneſe met the merchants from Arabia, Perſia, and Egypt. This might poſſibly have been in the hands of the Malays, or even the Chineſe [72], who ſeem to have been navigators in all ages as univerſally as the Arabians, and both might profit by the prejudices which ſeem to have excluded the Hindoos from a participation in theſe advantages.

There appears no method of tracing this commerce through the darkneſs of the middle ages, but by the few ſcattered intimations to be collected from Coſmas, William [73] of Tyre, Sanuto [74], Renaudot's Arabian Voyagers, and Marco Polo; but their general teſtimony is

[70] I find this connection of Arabians with India ſupported by Pococke, Sir Wm. Jones, and Sir Wm. Ouſeley. See Ebn. Haukal, p. 291.

[71] Pliny, when he mentions the embaſſy from Ceylon.

[72] Marco Polo, lib. iii. c. 1. ſpeaks much of *Indian* ſhips, but they ſeem to be *Chineſe*.

[73] See Bergeron Traité ſur la Navigation.

in favour of the preceding ſuppoſitions, and which, as I have no ſyſtem to maintain, I ſhould abandon as readily as I have adopted, if ever the weight of evidence ſhould preponderate againſt them. In the time of Marco Polo, the Arabians had not only encreaſed on the coaſt of India, but made conſiderable progreſs in extending the doctrines of the Coran: he mentions the trade from China [74] which met the trade from the Red Sea, no longer in Ceylon, but on the coaſt of Malabar; and though he remarks that the Chineſe veſſels ſometimes penetrated farther, even to Madagaſcar, yet the central mart is manifeſtly in Malabar, and apparently at Calicut, where the Portugueſe found it upon their firſt arrival. Here, he ſays, the ſhips from Aden obtained their lading from the Eaſt, and carried it into the Red Sea for Alexandria, from whence it paſſed into Europe by means of the Venetians.

THE COMPASS.

V. How theſe voyages were performed in the ſeas of India or China, without the compaſs, is a circumſtance ſo extraordinary, that many writers have rather aſſigned that inſtrument to the Chineſe, than ſuppoſed it poſſible that ſuch voyages ſhould be performed without it. Highly extraordinary it certainly is, that the Chineſe, who now never go beyond the limit of Japan on the eaſt, Malacca on the weſt, or Java on the ſouth, ſhould have ſailed to Madagaſcar in the thirteenth century; their knowledge muſt in that age have

[74] Lib. iii. c. 27. In the 9th century, the age of Renaudot's Arabs, the centre was at Coulam in Travancore. After the eſtabliſhment of the kingdom of Calicut by Ceramperumal, the trade centred there. M. Polo was in India in the 13th century, 300 years later than Ceramperumal.

been

been proportioned to their adventures; and I would not wiſh to conteſt the point with thoſe[75] who would furniſh them with means or inſtruments to qualify them for the undertaking; but Ramuſio[76] is clearly of opinion, that Marco Polo did not bring this inſtrument from China; and that he did not know it himſelf, becauſe he never mentions it. This negative evidence in regard to China, becomes poſitive, according to Nicolo di Conti, in regard to India; for he ſailed aboard a native veſſel on the Indian ſeas, about the year 1420[77]; and he ſays expreſsly they had no compaſs, but ſailed by the ſtars of the ſouthern pole, the elevation of which they had the art of meaſuring; and that they had alſo a method of keeping their reckoning by day or night, with their diſtance from place to place; that is, as we ſhould ſpeak in modern terms, they had a quarter-ſtaff or aſtrolabe, and log, but no compaſs.

The date of this voyage, ſixty or eighty years previous to the diſcovery of Gama, makes it highly intereſting; and the information is unique, for Nicolo ſailed on board an Indian[78] ſhip; and that the navigators made uſe of the ſouth polar ſtars, is a moſt extraordinary agreement with the account of Ptolemy; who ſays, they navigated

[75] Lord Macartney is fully convinced that the Chineſe compaſs is not derived from the Europeans: his reaſons for this may be ſeen in a paper with which he has furniſhed me (Appendix, No. I.); and has obligingly permitted me to publiſh with his name.

[76] See Dichiaratione ſopra M. Polo, Ramuſio, vol. ii. p. 17.

[77] He was abſolved by Pope Eugenius IV. in 1444 of apoſtacy, after having been in India 25 years; ſo that the date of his voyage, in this inſtance, may be from 1420 to 1430.

[78] Il naviganti dell' India ſi governano colle ſtelle del polo antartico .... & non navigano col Bussulo, ma ſi reggono ſecondo che trovano le dette ſtelle o alte, o baſſe; et queſto fanno con certe lor miſure che adoperano, et ſimilmente miſurano il cammino che fanno di giorno et di notte, & la diſtanza che e da un luogo all' altro, et così ſempre ſanno in che luogo ſi ritrovano eſſendo in mare. Ramuſio, vol. i. p. 344.

If *ſimilmente* refers to the preceding clauſe, it means that they kept their reckoning, not by the log, but by the ſtars, which is, in that caſe, a knowledge of finding their longitude as well as their latitude by aſtronomy.

the Indian Ocean in his age by means of the ſtar Canobus, which they called the Horſe. I ſhould have been glad to find the mariners on board this ſhip had been Arabians; but the deſcription of the veſſel is characteriſtically like thoſe which M. Polo ſailed in on the Chineſe ſeas, ſeparated into compartments, which the reſpective merchants on board hired each for himſelf and his property; and which were diſtinctly caulked, ſo as to prevent a leak in one part affecting any other: ſuch veſſels are ſtill in uſe on thoſe ſeas, but are more properly Chineſe or Malay, than Indian.

The teſtimony of N. di Conti is direct againſt the uſe of the compaſs in the ſhips of India, but ſtill it is not concluſive againſt the Chineſe; for Vertoman, or Barthema, in his paſſage from Borneo to Java, in a ciampan, or ſmall Chineſe veſſel, expreſsly mentions, that the pilot [79] had a compaſs. And this teſtimony is of greater importance, becauſe the date of his voyage from Borneo muſt be in 1503 or 1504, as he returned to Calicut in 1506, when Almeyda was viceroy. Now 1504 is ſeven years previous [80] to the arrival of the Portugueſe at Malacca: ſo that the Chineſe could not have had it from the Portugueſe; and if the ſhips of India had it not, they could not have received it through that medium of communication. There is ſomething very ſtrong, likewiſe, againſt their receiving it from the Arabs, whom they might have met at Calicut in the fifteenth century; becauſe, if the Arabs then uſed it, it was in the form they derived it from Europe, and divided into thirty-

[79] Moderator navis pyxidem, magnetemque, nec non paginam marinam, compluribus lineis diſtinctam, qua ventorum rationem inſinuant, ſecum, *more noſtro* attulerat. Grynæus in Barthema, lib. vi. c. 27. Ramuſio, vol. i. p. 168. More noſtro (I think) refers to the ſea card; but if to the whole, it does not quite prove whether Barthema had marked the difference between 32 and 48 points.

[80] The Portugueſe reached Malacca in 1511. Dalrymple, p. 3. Collections.

two

two points; whereas the Chineſe compaſs is divided into forty-eight, which ſeems almoſt concluſive that theirs was an original inſtrument, and not derived from Europe.

WEALTH OF ARABIA.

VI. AFTER the recital of theſe circumſtances, it is ſtill to be conſidered, that in the whole of what has been ſaid, it is intended to ſpeak only in general terms: it is not meant to aſſert, that no ſhips went to India from Egypt before the reign of Ptolemy Philomêtor, or that no Greeks, in a later age, paſſed beyond Ceylon to Bengal, or the Golden Cherſoneſe; but that the ordinary courſe of Oriental commerce was conducted in the way that has been ſtated, there is every reaſon to believe, and every evidence that is extant to prove. The value of this commerce, in the hands of the Arabians, is equally evident: their wealth was proverbial, and the particulars of it are detailed by Agathárchides. But there is ſtill one point in which the Arabians are eſſentially diſtinguiſhed from all the ſurrounding nations, which, through their means, partook in the commerce of the eaſt; which is, that however oſtentatious their neighbours might be, the riches of the Arabians were all applied to their private luxury and indulgence. In Perſia, and Chaldêa, thoſe vaſt public works and edifices aroſe, which aſtoniſhed the travellers of the ancient world; and in Egypt, the ruins of the Thebaid are an equal cauſe of amazement at the preſent hour. In a ſecondary rank, Tyre, Jeruſalem, Baalbeck, and Palmyra, ſurprize us with their magnificence; while in Arabia, hiſtory ſpeaks only of

of one public work, which was the Tank [81] at Mariaba; and when the head of that once failed, there never was ſufficient induſtry or public ſpirit in the country to reſtore it.

No adequate cauſe is aſſignable for this national diſtinction, but that ſpirit of independence which broke the body of the people into parts too minute for a combination of intereſts, and too diffuſe for co-operation. This ſpirit was never counteracted but for a ſhort time by enthuſiaſm; and no ſooner was that exhauſted by evaporation, than they returned again to the ſtate in which they are deſcribed by the ancients. They are ſtill a nation of merchants [82] and marauders, incapable of ſubjection, not leſs from their temper and habits than from the nature of their country; rarely formidable in a body, from their mutual jealouſy and diſtruſt; indifferent ſoldiers, but dangerous partizans.

No other reaſon is diſcoverable, why a nation that at one time poſſeſſed almoſt excluſively the commerce of the Eaſt, never arrived at a character of dignity and reſpect; and no other cauſe can I trace, why Idumêa became ſo eaſy a conqueſt to the Hebrews, Tyrians, Babylonians, and Romans. It is the influence over their government, and the poſſeſſion of their harbours on the Red Sea by the Romans, which is now to be inveſtigated; and if the command of the commerce obtained by this power continued with little interruption till the time of Juſtinian, and was not annihilated till the

[81] This Tank is placed at Mariaba; but Pliny informs us, that Mariaba ſignifies a capital; ſtill we have in Reiſke, Maraba, the ſame as Saba; ſo that the Tank will mark Saba. See Reiſke in Abilfedam, voc. Jemana. The Tank failed, according to ſome authors, in the time of Alexander; others ſay, after Chriſt. Univ. Hiſt fol. ed. vii. p. 276.

[82] Strabo and Diodorus are in concert with Pliny, who ſays, lib. vi. p. 340. Pars æqua in commerciis et latrociniis degit: a fact equally true in all ages.

irruption

irruption of the Mahomedans, it is a duration of this commerce in one channel, longer than has fallen to the lot of any other people in whoſe hands it has been placed.

LEUKÈ KOMÈ.

OUR inquiry commences with Leukè Komè, or the White Village[83]; and the character of White is attributed to ſeveral towns or villages on this coaſt. Ptolemy has an Argè Komè below Yambo; Haûr is another place, about three hundred miles from the head of the gulph; and a third, Haûr or Havarra is diſcoverable in the Itinerary, but forty-five miles from the ſame point. All theſe terms imply whiteneſs; but d'Anville aſſumes the ſecond for the Leukè Komè of the Periplûs. In this he is juſtly ſuppoſed by M. Goſſellin to be miſtaken; becauſe this ſecond Haûr, at more than three hundred and fifty miles from Petra, could not afford a ready communication with that capital, neither could it be within the limits of Petrêa, but muſt then have belonged to Hejaz; which, that it did not, we ſhall have ſufficient proof in the expedition of Elius Gallus.

M. Goſſellin fixes upon Moilah; to which he is, perhaps, more particularly directed, by finding a name of notoriety in a ſituation that is probable: but on this coaſt, as he has very properly obſerved himſelf, there is no certainty to be obtained; the ancients have left us few marks of diſtinction, becauſe they avoided the coaſt, which was itſelf dangerous, and more dangerous ſtill from the diſpoſition of its inhabitants; while the few notices which they have

[83] Almoſt every place inhabited by Arabians, is rather a village than a town or city.

left, are obliterated by the retreat of the ſea, and the increaſing advance of the ſhore. This ariſes from a cauſe which operates on the whole eaſtern ſide of the gulph; and in the lower part of it there are the remains of places twenty miles inland, which were formerly marts or harbours.

This muſt be accepted as a reaſon why ſo little ſatisfaction can be given in regard to individual poſitions. The general character of the coaſt, and the diviſion of the provinces, will be diſtinct; but identical locality is by no means to be expected. This will be apparent in the immediate object of our inquiry, for the White Village itſelf is obſcured by difficulties not eaſy to be ſurmounted.

	Lat.
The Haûr of d'Anville[84] is in - - -	25° 2′ 0″
The Moilah of d'Anville, in - - - -	27° 30′ 0″
The Moilah of Goſſellin, in his Map of Ptolemy	27° 50′ 0″
Arga Komè of Ptolemy, by the { Latin text -	22° 40′ 0″
Greek text -	22° 30′ 0″

But that there is ſtill another Haúara, Avara, or Havárra[85], we

[84] The Haûr of d'Anville is aſcertained by Al Edriſi to be lower than the iſland Naman, p. 109; a proof that it cannot be the Hauarra of the Itinerary.

[85] But I am apprehenſive that I read 20 twice inſtead of once; if ſo, it is only 45 miles from Haila to Hauarra, and 38 from Hauarra to Petra. The latter diſtance muſt, in that caſe, aſſuredly be erroneous; and the former too, unleſs the ſea of Acaba be as ſhort as it is repreſented in the ancient maps, inſtead of running up to the north ſo far as it does in the maps of d'Anville, Goſſellin, and De la Rochette. Still, whatever be the errors, it is curious to ſee both theſe routes detailed at the extremity of the empire, in the reign of Theodoſius; and the ſhorter the diſtances are, the more incompatible they are with the Haûr of d'Anville. (See d'Anville's Egypt, p. 129. with his opinion of the Itineraries.) There is a ſimilar diminution of diſtance from Phara, or Ras Mahomet, to Haila, which the Itinerary makes only 16 miles; and both deficiencies, if they are ſuch, muſt be imputed to the ſuppoſed ſhortneſs of the ſea of Acaba, *i. e.* the Elanitick Gulph.

are certain from the Itinerary; and Stephanus [86] informs us, that it was founded by A'retas ſon of O'bodas, and called Aúara (which ſignifies *white* in Arabick and Syriack), from ſome viſion of a man in *white*. Pliny adds, that Arra [87] is in the country of the Thimanêi, the adjoining tribe to the Nabatêans, and that here is the centre of commerce. Upon theſe authorities I had wiſhed to have placed this Havarra on the coaſt, and to have aſſumed it for the ſite of the White Village; more eſpecially as the Itinerary of the Peutingerian Tables points to the entrance of the Elanitick Gulph, and has one route of ſixty-one miles from Aila to Havarra, and another of thirty-eight [88], from Havarra through Zadagaſta [89] to Petra.

[86] See Stephanus Byz. in voce.

[87] Arra oppidum in quo omnis negotiatio convenit. Plin. vi. c. 28. The Thimanêi are the Bythimanees, or Batmizomanees, of Agatharchides, and upon the coaſt.

[88] I am not certain that I read the diſtances right; but they appear thus:

	Miles.	
From Clyſma to Medeia - -	40	
to Phara - -	80	
	—	120
to Haila - -	50	
	—	50
to Ad Dianam -	16	
to Poſidium -	21	
to Havarra - -	24	
	—	61
to Zadagatta -	20	
to Petra - -	18	
	——	38
	269	

If by Clyſma we are to underſtand the head of the gulph, or Suez, the opening of the compaſſes gives preciſely 200 Roman miles from Suez to Ras Mahomed, by d'Anville's map; 180 m. En. by De la Rochette's; 225 by Capt. Cook's Chart. When we find therefore only 120 miles in the Itinerary, we muſt ſuppoſe that a diſtance is omitted between Arſinoè and Clyſma, for both are noticed; but there is no number between the two, and Clyſma is placed on the eaſtern ſide of the gulph, not on the weſtern, as in d'Anville. But if the numbers we have, expreſs the ſenſe of the author, then we muſt add a third at leaſt; and, by the ſame proportion, a third from Phara or Ras Mahomed to Haila, making that nearly 67 B. miles; a diſtance that agrees neither with d'Anville or De la Rochette, for both make it near 110. I have always ſuppoſed this diſtance much too large; and if Irwin's Chart might be depended on, my judgment muſt be right. Irwin is the only traveller I have met with who has entered the Elanitick Gulph; but though he ſpeaks of the head, he does not quite ſay that he ſaw it.

[89] The Zaanatha of Ptolemy.

But in oppoſition to this we have the expreſs teſtimony of Ptolemy[90], that Avarra is inland, and more northerly than Aila. This reduces me to the neceſſity of concluding, that this Haûr, or Havarra, cannot be the White Village of the Periplûs; ſo that neither the Haûr of d'Anville, the Argè Komè of Ptolemy, or this Havarra of the Itinerary, will anſwer our purpoſe. But there are ſome circumſtances in Agatharchides, which will lead us to a ſituation where ſuch a port ſeems to be pointed out, in preference to any other on the coaſt.

VII. THAMUDÉNI AND CANRAITES.

This author, at the entrance of the Elanitick Gulph, has three iſlands: one, ſacred to Iſis; and the two others called Sookabúa and Salydó. Theſe iſlands, after having been loſt for twenty centuries, have been reſtored to geography by M. Irwin. He is the only voyager, as far as I can diſcover, who has ever entered this bay; and if his chart may be depended upon, he went up it five-and-twenty miles: in conſequence of this he ſaw theſe iſlands, and has named them Tirán, Sanafir, and Barkan. I have never ſeen[91] them in any chart, previous to his, arranged in the ſame order; but they bear ſuch teſtimony to the fidelity of Agatharchides, that he deſerves credit when he adds, that "they[92] cover ſeveral harbours "on

[90] See Tab. Aſiæ, iv. and lib. v. c. 15.

Elana	- -	26° 15′ 0″
Avara	- -	29° 40′ 0″

Still there is a confuſion; for the Greek text ſays,

Elana	- -	29° 15′
Avara	- -	29° 20′

But, after all, Avara is north of Elana.

[91] The names are in Niebuhr, but the poſition is erroneous. One iſland is ſtill called Jobun by De la Rochette.

[92] Τὴν δ' ἐρημένην χώραν νῆσοι τρεῖς ἐκδέχονται, Λιμένας ποιοῦσαι πλέους· . . . . . μετὰ δὲ τὰς νήσους τὰς ἐκκειμένας ἐστὶν ἰδίαν αἰγιαλὸν λιθώδη καὶ μακρόν, ἡ δὲ χώρα Θαμυδηνῶν Ἀράβων· ὁ δὲ πρὸς ταύτην παράπλους ἐπὶ σταδίους τῶν χιλίων πλέους πάντων χαλεπώτατος·

" on the Arabian ſhore" [as the Zaffateen Iſlands protect the port of Myos Hormus]; and one of theſe harbours, I conclude, muſt be the Leukè Komè of the Periplûs; for he adds, " to theſe iſlands " ſucceeds the rocky coaſt of the Thamudeni, where, for more than " a thouſand ſtadii, there is no harbour, no road where a veſſel can " anchor, no bay to afford protection, no ſcrap of a projecting " point, to which the mariner can fly for refuge in a moment of " diſtreſs."

However the colouring of this picture may be heightened, the general deſcription is true, as may be ſeen by a reference to M. Irwin's Journal, from the 22d of June to the 9th of July; where we have every day iſlets, breakers, ſhoals, ſands, and ſunken rocks, with the mention of only one cove where the ſhore could be approached. The refuge his Arabian boat found, was generally under iſlets; but a navigator, who did not dare approach the ſhore, might well paint it in the ſame colours as Agatharchides has done. Irwin carries Moilah fifty miles more to the north than it appears in other charts [93], and within the Elanitick Gulph: if this be true, my concluſion is perfectly in correſpondence with that of M. Goſſellin; and if, by taking different methods, we both arrive at the ſame concluſion, it muſt be a ſtrong confirmation that the point we have both fixed on is right; for a ſafe anchorage at Moilah, covered by the iſlands, and the unapproachable nature of the coaſt below, fix Moilah to a certainty for the Leukè Komè of the ancients.

τατος· ὐ γὰρ ἐστιν . . . ὐ λιμὴν ἔυορμος, ὐ σάλος ἐπ αγκύρας, ὐ κόλπος ἐπισκιπὴς, ὐ χηλῆς ἐντύπωμα, ἀναγκάια καταφυγὴ, τὸν ναυτιλλόμενον δεχόμενον. Agatharch. apud Hudſon, p. 59.

Χηλῆς ἐντύπωμα is a dubious expreſſion; for though χηλὴ is the foot of a wall, or rather looſe ſtones thrown into the ſea to break the waves and protect the maſonry of a pier, ἐντύπωμα does not occur in the Lexicons: it may be the *form*, the *indenture* at the commencement of a projection. Unleſs the author aimed at a metaphor, by taking χηλὴ in its ſenſe of a hoof, and ſo intended to mean the *impreſſion of a hoof*; but in this ſenſe the metaphor is not juſt.

[93] P. 143. oct. ed. vol. I.

VIII. BURNT ISLAND, MOOSA, COAST OF YEMEN.

From Leukè Komè to the mouth of the Straits, a courſe of more than a thouſand miles, we have only two places mentioned—the Burnt Iſland, and Mooſa: a proof, as it ſhould ſeem, that this track was little frequented; and yet the author, by ſpeaking in the firſt perſon, ſeems to have performed the voyage himſelf. The dangers he deſcribes at large, much in the ſame manner as we have already reported them from Agatharchides; and the tribes, he ſays, which inhabit this tract, are numerous; ſome ſpeaking a language perfectly diſtinct, and others a different dialect of the ſame. Thoſe on the coaſt live in huts or cabins, like the Iethyophagi; and thoſe who are inland, are a treacherous[94] race, living in hordes or villages, and ſpeak two different tongues. If a veſſel is driven to this ſhore, ſhe is plundered; or if ſhipwrecked, the crew is reduced to ſlavery. The general name of theſe tribes is Canraites; and they are treated as enemies, and ſeized for ſlaves, by the other regular governments of Arabia. But it is not only the diſpoſition of the natives which makes the navigation dangerous; for the coaſt itſelf is without harbours or roads, full of rocks, ſhoals, and breakers, and dangers of every ſort; for which reaſon, in going down the gulph, WE ſtand off from ſhore, and keep our courſe down the middle of the gulph, very deſirous[95] of reaching [the more

[94] πονηροῖς ἀνθρώποις διφώνοις.

Suppoſed by Bochart to be Caulanites.—Caulan, a province and mountain between Mecca and Sana. Phaleg. p. 143.

[95] The word is παροξύνομεν. The ſentence ſtands thus: διὸ καὶ ἱστωλιόντων, μίσον πλεῖν κατέχομεν, καὶ ἰὸς τὴν Ἀραβικὴν χώραν μᾶλλον ΠΑΡΟΞΥΝΟΜΕΝ, ἄχρι τῆς κατακεκαυμένης Νήσου. I had very much doubted of the conſtruction of this paſſage, when I cited it in the voyage of Nearchus; but I am now perſuaded, that by conſidering Ἀραβικὴν χώραν as the civilized part

more civilized part of] Arabia, which commences about the parallel of Burnt Iſland, and continues down the whole coaſt to Mooſa. In this tract the inhabitants are under a regular government, leading a paſtoral life, and raiſing vaſt herds of oxen, camels, and other ſtock. Mooſa is an eſtabliſhed mart of great trade, in a bay near the termination of the gulph, at the diſtance of twelve thouſand ſtadia, or twelve hundred [96] miles from Bereníkè; and the whole [of this part] of Arabia abounds in merchants and mariners, both maſters of veſſels and common ſailors, and is commercial in the higheſt degree. The commodities of the country are rich and numerous; but beſides theſe, there is a great traffic [in India articles] from Barugaza, or Cambay. Inland from Mooſa, at three days diſtance, lies Savè or Sauè, which is the ſeat of Cholébus, the king of the diſtrict called Maphartis; and nine days farther inland is Aphar or Saphar, the reſidence of Charibáel, paramount both of the Sabêans and Homerites. This is the ſovereign to whom the Roman emperors addreſs their embaſſies, and whoſe friendſhip they conciliate by preſents [97] of various ſorts, and conſiderable value.

We have here a general diviſion of Arabia correſponding to the modern diſtinction of Hejaz and Yemen, as nearly as can be expected after an interval of eighteen centuries. The northern part, occupied by Bedoweens, robbers, and marauders, living under tents

part of Arabia, that is, Yemen or Sabêa, the whole difficulty is removed; and the uſage of Ἀράβων in the ſame ſenſe twelve lines lower, juſtifies the interpretation; for, τὸ μὲν ὅλον Ἀράβων ναυκληρικῶν ἀνθρώπων καὶ ναυτικῶν πλεονάζον, does not refer ὅλον to the *whole* of Arabia, but to the *nobule* of Sabêa, as it is evident by the context.

[96] This is very accurate, reckoning the paſſage acroſs the gulph, firſt to Leukè Komè, and then down the gulph to Mooſa.

[97] Hudſon renders this paſſage as importing preſents made by Charibáel to the Roman emperors; but in a following paſſage the preſents from the Romans are ſpecifically mentioned, without any notice of a return.

in

in hordes almoſt without towns, villages, or ſettled habitation of any ſort; while the ſouthern part is in a civilized ſtate, highly cultivated, poliſhed, and commercial, and under a regular form of government, ſuch as Niebuhr found at Sana within theſe thirty years.

The limit of Hejaz, or Arabia Deſerta, is fixed by d'Anville in lat. 17° 12′ 0″ [98], which gives it an extent of coaſt of near ſeven hundred and fifty miles, while there remain but little more than three hundred within the ſtraits aſſignable to Yemen, or Arabia Felix. The northern part of the firſt diviſion is that which anſwers more particularly to the dangerous coaſt deſcribed by the ancient authors, and explored by Irwin, terminating at Haſſan Iſle, in lat. 25°; to which ſucceeds Yambo, the port of Yathrib or Medina, and Gidda or Judda, the port of Mecca, the Maco-rabba or Great Makka of Ptolemy. This appellation proves that it was a place of conſequence in that early age; and hiſtory ſhews that there is hardly a place which deſerves the name of city, except Mecca and Medina, in all that ſpace which geographers allot to Arabia Deſerta, acroſs the vaſt peninſula, from the Red Sea to the Perſian Gulph and the Euphrates. The numerous tribes which inhabit this deſert are the Saraceni of the ancients, ſo called from Saharra [99] or Sarra, a deſert, and correſponding exactly with the modern term of Bedoweens. In what ſenſe this country is a deſert, was unknown to the ancients, and is almoſt equally unknown to us; but that it is not arid, ſo as to preclude the produce of the earth, is evident from the ſwarms which theſe tribes furniſhed in the early period of the Mahomedan

[98] 19° 0′ 0″ Niebuhr; 18 0′ 0″ De la Roche-chette. Bedijah is Campania.

[99] Bedijah-Campania, Reiſke in Abilfedam, p. 5. Arabiſſæ Baduwinæ ſolebant nempe nutrices ex al Bedijah (*i. e.* campania) Meccam ire.

conqueſts,

conqueſts, and from the conſideration that every Arab is a horſeman. Little as will ſuffice to ſupport an Arab and his horſe, both muſt be ſupported; if little corn is ſowed or conſumed, ſtill thoſe who live on the product of their herd muſt find paſture for their oxen, ſheep, camels, and horſes; and though many expatriate for this purpoſe in the ſeaſon, the majority ſtill remains at home, both winter and ſummer. Neither can their predatory life ſupply all their wants; for a whole nation muſt have a national ſupport. Robbers as they are, they do not rob every one; the caravans ſtill diſtribute all the merchandize which comes annually to the ports of Yambo and Jidda, through this very country; and in the commerce which the ancients deſcribe, there was a regular intercourſe between Sabêa and Petra, from the South, and between the gulph of Perſia and Pétra, from the Eaſt. This trade has fluctuated in different ages, from external cauſes: it is at this moment, perhaps, at a lower ebb than ever, from the commercial ſuperiority of the Europeans in the Eaſtern Ocean, and from a diminution in the ſpirit of pilgrimage. But Mecca and Medina are ſtill to be conſidered as marts rather than ſanctuaries; and the commodities brought by the Engliſh from India, and by the Turks from Suez, ſtill centre at Jidda [100], as an emporium of conſiderable importance.

It is the Turkiſh trade from Suez which the Romans occupied by being maſters of Bereníkè, Myos Hormus, Petra, and Leukè Komè. It is the Engliſh trade from India, which the Greeks and Romans firſt found in the hands of the Sabêans, and afterwards aſſumed to

[100] At the time Bruce was there, nine ſhips from India were in the harbour, one of which was worth 200,000*l.*; and one Arab offered to purchaſe the nine cargoes. All theſe, he adds, are diſperſed over the wildeſt part of Arabia by men with whom no traveller would truſt his life. Bruce, vol. i. 278.

themſelves, as ſoon as they had fleets on the Red Sea that neither feared the Nabathêan pirates at the head of the gulph, or the Sabêan merchants at the ſtraits; and from the time they learned the nature of the monſoon from Hippalus, they made a voyage to India more advantageous, than the purchaſe of a cargo at Mooſa or Okélis.

IX. EXPEDITION OF ELIUS GALLUS.

THE voyage from Suez or Arsínoè was firſt planned by Neco; it was afterwards meditated by Alexander, and it was executed by the Ptolemies previous to the eſtabliſhment of Myos Hormus and Berenikè. It was not unknown to the Romans when they reduced Egypt, though then in diſuſe; but Elius Gallus ſet out on his expedition from this port, and Strabo imputes his failure to this circumſtance as a leading cauſe.

Strabo laments that this expedition added little to the geographical knowledge of Arabia; and we have reaſon to complain that Strabo, who lived in habits of intimacy with Gallus, has recorded ſo little of the information which might have been obtained from that commander. The conſequence is, that d'Anville, who follows Pliny, carries the Roman arms to Maríaba, the Mareb of the Arabians; and that M. Goſſellin, by his interpretation of Strabo, ſuppoſes Maríaba, or Marſýaba, to be the Maco-raba [*1] of Ptolemy, the Mecca of Mahomet. The diſtance between theſe two places is little ſhort of nine degrees; ſo that the difference between the two eſtimates is 675 Roman miles.

[*1] Mecca is always written Macca by Reiſke, in his verſion of Abilfeda.

If

If there were any data to determine this diſpute, no labour ſhould have deterred me from inveſtigating it to the utmoſt; but as Pliny ſays, that the places which occurred in the expedition of Gallus are not found in authors previous to his time, the ſame may be ſaid of ſubſequent writers; for there is not one of them, ancient or modern, who will do more than afford matter for conjecture. This is the reaſon that compels me to give a ſketch only of an expedition ſo intimately connected with the commerce of the ancients in Arabia.

The commiſſion of Gallus from Auguſtus was to explore Ethiopia, the country of the Troglodytes, and Arabia. The firſt part was executed by Petronius, his lieutenant, and terminated by the ſubmiſſion of Candacè, queen of Meroè. But Arabia, Gallus reſerved for himſelf; and the country of the Troglodytes he croſſed when he landed at Myos Hormus, on his return. This expedition commenced at Cleopátris [102], in the neighbourhood of the modern Suez, where we find him at the head of an army conſiſting of ten thouſand Romans, five hundred Jews, and a thouſand Nabatêans from Petra, with a fleet of eighty [103] veſſels of war, and an hundred and thirty tranſports. Syllêus [104], the miniſter of O'bodas king of Petra, was to conduct this force; but his intereſt was concerned in defeating the expedition, which he effected, and afterwards paid the forfeit for his treachery with his life. The firſt error into which he led Gallus, was the preparation of a fleet, which conſumed [105] much time,

[102] Cleopátris is conſidered as Arsínoè; but perhaps Arsínoè, Cleopátris, and Suez, have all followed the retreat of the ſea at the head of the gulph.

[103] Biremes, triremes and phaſeli.

[104] See ſupra, p. 246.

[105] We have the account of preparing a Turkiſh fleet in the ſame manner, anno 1537; by which we learn, that the country affording no materials for ſhip-building, the ſeveral articles

time, and was of no ſervice; for the army might have proceeded from Cleopátris to Petra, and thence to the head of the Elanitick Gulph, through a friendly country, and in the ordinary track of the caravans [106]. But fifteen days were required to extricate the fleet from the ſea of Suez, and to reach the road of Leukè Komè; and here, when they arrived, many veſſels had been loſt, and the troops were ſo afflicted with a diſorder in the mouth, and ſwelling in the legs, that the remainder of the year was loſt, and the expedition delayed till the following ſpring.

Upon leaving Leukè Komè, Gallus advanced, firſt, through a deſert [107] into the country of A'retas, who was related to O'bodas,

ticles were brought acroſs the deſert from Cairo on camels. In this manner a fleet of 76 veſſels was conſtructed, which, from the time it weighed from Suez, was ten days before it reached Tor, and left it on the eleventh. This accounts for the fifteen days employed by Gallus in performing a paſſage of little more than 240 miles. See Ramuſio, tom. i. p. 274. Viaggio per un Comito Venitiano.

[106] We have the route of the pilgrims in Mel. Thevenot, Pococke, and Shaw, from Cairo to Mecca; and reckoning from Ageroud, which is near Suez, the account in Thevenot ſtands thus, tom. i. p. 151:

	Hours.
From Ageroud to Navatir - -	6½
Raſtagara - -	10
Kalaat el Nakel	15
Abiar Alaina (Aila?) - -	14
Sath al Acaba	15
Kalaat al Acaba	16
Dahr el Harmar	6½
Sharaffe Beni-gateie - -	14
Magure Schouaib (Jethro) -	14
Moilah - -	15
	126 126
The rate of a caravan is from 3 to 2½ miles an hour - - -	3 2½
	378 252
	63
	315

This route meaſures, by the compaſſes, in a right line on De la Rochette's map, nearly 280 miles, which, with the allowance for road-diſtance of ⅛, amounts to 320 miles; and this at 15 miles a day, a moderate march for a Roman army, requires 21 days: ſo that they proceeded faſter by ſea than they would have done by land; the time loſt, therefore, was in the preparation of the fleet.

[107] This is the ſame deſert which Mahomet paſſed in his march from Medina to Hagjr and Aila, where, Abilfeda ſays, magnas illi per viam tolerabant moleſtias ab æſtu et ſiti, p. 52. Ed. Reiſke, 1754.

and

and ſeems to have been the ſovereign of the Thamudites; but Syllêus had the ſame influence here as in Petrêa; and though the country was not deſtitute, or the prince unfriendly, thirty days were employed before the army reached the country of the Nomades or Bedoweens, called Ararênè [108], and ſubject to Sabus. This tract has a reſemblance to the territory of Medina and Mecca; and the ſpace of fifty days employed in paſſing it, till they reached the city of the A'grani [109], Négrani, or Anágrani, which was taken by aſſault, is ſome confirmation of the conjecture. The king had fled into the deſert; but the country was not hoſtile, nor altogether incapable of ſupplying the neceſſaries requiſite for the army [110].

From hence, after a march of ſix days, they arrived on the bank of a river, where the natives were collected in a body, and oppoſed their paſſage: a battle was the conſequence, in which, with the loſs of only two Romans, ten thouſand Arabians were ſlain. Strabo deſcribes them equally deficient in ſpirit, as they were ignorant of the art of war; and yet theſe very tribes were in a future age, under

[108] Ararênè is probably Sara-rene, as Aphar is Saphar; and Sara is Saharra, *the deſert*.

[109] A'grani in the firſt mention is written Négrani in the MSS.; and on the ſecond, τὰ Νάγραινα: and Caſaubon wiſhes to read Αγραίοι. See Strabo, pp. 781, 782. All theſe readings prove the uncertainty of the ground we ſtand on; and any of them would juſtify d'Anville in aſſuming Najeran (a place fully deſcribed by Al Edriſſi, and well known to Niebuhr), if the other circumſtances of the expedition will accord. Najeran is a fortreſs dependant on Mecca: it lies 12 days ſouth of that capital, and eaſt of the mountains which bound the Tehama. See Al Edriſſi, pp. 48. 50, 51. This is perfectly conſiſtent, if Ararene is the country of Medina and Mecca; and Najeran muſt be, by comparing circumſtances in Al Edriſſi, on the borders of Yemen, nearly on a parallel with Sadum Rah. Conſult. p. 48.

[110] Ali paſſed through Najeran, and brought a tribute from it, when he was returning from Yemen, whither he had been ſent to preach the Koran by Mahomet; and if Nágrana be Najeran (as to all appearance it is), it directly contradicts Goſſellin's hypotheſis, that Elius Gallus terminated his expedition at Mecca. Abilfeda Reiſke, p. 53. Abilfeda mentions the converſion of the kings of the Homerites, the people of Arabia Felix; and adds, that Ali's preaching converted the whole tribe of Hamdan in one day.

the

the influence of Mahomedan enthuſiaſm, to ſubdue the world, from the Pillars of Hercules to the Indus.

The loſs of this battle produced the ſurrender of Aſca, a city in the neighbourhood; and, without learning what time was ſpent here, or what diſtance intervened, the next place we find them at is Athrulla. Athrulla was taken without difficulty, and garriſoned, and a ſupply of proviſions was obtained, which enabled them to proceed to Marſyaba. This city is deſcribed as the capital of the Rhaminites, and the ſeat of Ilaſar [111], the ſovereign of the country. Here terminated the expedition; for, after lying before the place ſix days, Gallus was compelled, by want of water, to raiſe the ſiege, and retreat to Anágrana, where the battle had been fought [112], and which he did not reach till after a diſtreſsful march of nine days.

From this time, the preſervation of his army was the more immediate object of the commander, than the hope of conqueſt: he had ſpent ſix months in reaching Marſyaba; he was now convinced of the perfidy of Syllêus; he imputed the whole failure to the direction of the march by the advice of that miniſter; and if the ſame delay ſhould occur on the retreat, he ſaw that the deſtruction of the army was inevitable.

To prevent this, it is evident that the route was changed; and we are led to conjecture, that it was directed from the interior to the

[111] By conſulting Ptolemy, the country of Eliſárus, or the Eliſáei, is far too much to the ſouth to allow of the ſuppoſition that Gallus went no farther than Mecca.

[112] The copies of Strabo are ſo incorrect in theſe names, that though there is evidently an intention of the editor to make A'grana firſt mentioned, and Anágrana or τὰ Νάγραια in this place, correſpond, either the author or the text are at variance; for the battle was not fought at A'grana, but ſix days from it, and apparently at Aſca, as that city ſurrendered immediately after the battle.

coaſt. In this caſe, the army muſt have croſſed the mountains and deſcended into the Tehama; and yet in a march of ſixty days, we have nothing to guide our inquiries but the mention of four places, without dates, and with one diſtance only ſpecified: theſe are, *The Seven Wells*, eleven days from Anágrana; Chaalla, Málotha, and Nera. Nera[113], we are informed, was in the territory of O'bodas, that is, in Petrêa, and in all probability at ſome diſtance to the ſouthward of Leukè Komè.

At Nera the army embarked, and was eleven days in croſſing the gulph to Myos Hormus. The route from this port to Koptus on the Nile has been already deſcribed; and from Koptus, Gallus proceeded to Alexandria with the ſhattered remains of his forces. Of theſe, ſeven only had periſhed by the ſword; but a very great proportion was rendered unſerviceable by diſeaſe[114], famine, and a variety of diſtreſſes which they had experienced in the courſe of the campaign.

Thus ended an expedition, planned without policy and conducted without capacity. If it had ſucceeded, the Romans could not have eſtabliſhed themſelves in the country; and by its failure, it retarded

[113] Nera, in the margin of Strabo, is written Hygra, and Negra in Caſaubon's tranſlation; and in ſuch a fluctuation of the MSS. or printed copies, we have nothing to determine our doubts: but we may conclude, that the place, whatever is its name, muſt be conſiderably below Leukè Komè, as the paſſage from that port to Myos Hormus was only three days. This, however, was for a ſingle ſhip, and Gallus had a fleet; but we muſt ſuppoſe he continued his courſe up the coaſt to the northward, and came by Ras Mahomed to the Egyptian ſhore. Much difficulty ſtands in the way of calculation; and, after all, it is not quite clear whether Strabo's eleven days are to be reckoned from the time Gallus reached Nera, or from the day he left it: I conclude the latter to be intended. A Negra is mentioned by Cedrenus, p. 364. 500 years later, where a St. Arethas was put to death by Eleſbaas, the Abyſſinian conqueror of the Homerites. One ſhould not have expected to find a Chriſtian martyr, of the name or family of the Arethas's of the deſert.

[114] Dio ſays, they did not merely retreat, but were driven out.

their

their full intercourſe with India for almoſt a century. But if it were poſſible to give the reader ſatisfaction on the extent of it, no apology would be requiſite for the digreſſion. This, from the ſcantineſs of materials, cannot be done; but as my conjectures differ both from d'Anville and M. Goſſellin, I ſhall barely ſtate the grounds on which they are founded, and leave the determination to the judgment of the reader.

The firſt ſtep towards fixing the termination of the expedition, would be to diſtinguiſh Marſýaba from all the cities with which it is confounded.

The Marſýaba of Strabo is in the country of the Rhamanitæ, and under the government of Ilaſárus. It is not the Mareb of Sabêa, where the great Tank [115] is, for that hé calls Meríaba of the Sabêans; and this ſufficiently declares againſt d'Anville's ſyſtem, which carries Gallus into Sabêa, and on which Goſſellin juſtly obſerves, that if Gallus had beſieged Mareb, he would not have been obliged to raiſe the ſiege for want of water, the reaſon aſſigned by Strabo.

Ptolemy has likewiſe a Máraba (written Báraba in the text) which he places in the country of the Minêans, and calls it a metropolis; and a Maríama, two degrees to the ſouth-eaſt; but he has no Maríaba either in Sabêa or the country of the Homerites. His Eliſári, the Ilaſar of Strabo, are ſtill farther ſouth than the Minêans, and upon the coaſt.

Pliny has two Maríabas: one marked by the Tank, called Baramalchum [116], the Royal Sea or Lake; and another, in the country

[115] Mareb is ſtill the capital of a large province in Yemen called Dajof, between Najeran and Hadramaut, where the ancient traditions concerning the Tank, the queen of Sheba, &c. are ſtill current. See Nieb. t. ii. p. 119. Arabic.

[116] Bahr-u-melk, Bahr-u-malk, Bahr-u-malkim; the Lake of the King, or the Kings; the Royal Lake.

of

of the Calingii; he adds, that Mariaba is a general name of a capital. It is apparently then the Mariaba [117] of the Calingii which he informs us, contrary to the aſſertion of Strabo, that Gallus took, and finiſhed his invaſion at Carípeta. But it is ſtill more extraordinary, that the other cities he mentions as taken and deſtroyed by Gallus, do not, in any one inſtance, correſpond with thoſe of Strabo, except that his Negra is poſſibly Nera [118].

Dio [119] terminates the irruption at Athlula, evidently the Athrulla of Strabo: he mentions the army being afflicted with a diſeaſe in the head and legs; and adds, that Gallus did not merely retreat, but was driven out by the natives.

The whole of this goes to prove, that Gallus did not reach Mareb Baramalcum; and, in ſhort, the fact is impoſſible; for *that* Mareb is above eleven [120] hundred miles from Moilah, and the retreat of Gallus, in ſixty days, would require a march of almoſt twenty miles a day, which, for ſuch a continuance, is not to be performed.

But if the Mareb of d'Anville be too diſtant, the Mecca of Goſſellin is too near; for the route of the caravan, from Moilah to Mecca, makes it only 731 miles, at 3 miles an hour.

547	—	at $2\frac{1}{2}$ miles an hour.
546	—	d'Anville's Map.
560	—	De la Rochette's Map.
Add for road-diſtance 80		
640	—	probable mean diſtance, from 620 to 640.

[117] Supradictam Mariabam. The Mariaba of the Calingii is the laſt mentioned, and Hardouin ſuppoſes that to be meant.

[118] May it not be Negrana, for Nagrana?

[119] Lib. liii. p. 350. Ed. Steph.

[120] It is 1085 in a right line, which, with the addition of a ſeventh, becomes 1240, and increaſes the difficulty.

If, therefore, Gallus was advancing for ſix months, he muſt have marched little more than an hundred miles a month. And let us ſuppoſe, with Goſſellin, all the fraud of Syllêus, and all the deviations of the march he pleaſes, this advance is far leſs than a Roman army can be ſuppoſed to make. The country Gallus was deſirous of reaching, was the country of gold [121], frankincenſe, myrrh, and ſpices, certainly either Hadramaut or Yemen; and when he was at Marſýaba, he was told he was but two days diſtance from the province he wiſhed to enter. He might be deceived in that, and moſt probably he was; but the deception could hardly amount to the difference between two days and thirty, and Mecca is little ſhort of thirty days from Hadramaut.

Goſſellin ſuppoſes Athrullà to be Yathreb or Medina, and Marſýaba to be Macoraba or Mecca; but it is not eaſy to diſcover the reſemblance of theſe names, or the other five he gives from Pliny. Strabo is ſurely a better guide, who was in habits of intimacy with Gallus, and who received the names moſt probably from his report. Pliny ſays, that Marſýaba was taken, and that the expedition terminated at Carípeta: Strabo aſſerts, that Marſýaba was not taken, and does not notice Carípeta at all. It is not ſafe to build on ſimilarity of names; but Nagrana, which Goſſellin ſuppoſes to be Al Nokra [122], is certainly more nearly related to Najeran in ſound. Najeran is aſſuredly as ancient as Mahomed's time: it is a conſpicuous pro-

[121] Strabo, 780.

[122] Al Nokra is the place where the road from Baſra to Medina joins that from Kufa to the ſame city. A Batra ad Medinam ſtationes fere viginti, & hæc via coincidet cum extremitate Kufæ prope Maaden al Nokra. Al Edriſſi, p. 121. Even as d'Anville has placed Al Nokra, I conceive it lies far too much to the eaſt to be in the track of Gallus; and, from the expreſſion of Al Edriſſi, I conclude it lies farther eaſt than d'Anville has placed it. But even if d'Anville is right, Al Nokra is upwards of 200 miles out of the road that Gallus appears to have taken.

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vince ſtill, according to Niebuhr [113]; and Al Edriſſi [114] places it on the road from Mecca to Yemen. This appears to be the very route by which Gallus was advancing; and Najeran, by the Arabian accounts, was capable of affording the ſupplies of which the army ſtood in need. I am myſelf therefore perſuaded, that Gallus entered the country of the Minêans, and that the city he aſſaulted, whether Maríaba, Marſỹaba, or Carípeta, was the capital of that province; for Maríaba implies a capital in general; and if Ilaſar is the king of this tribe, whether Calingii, Rhamanítæ, or Eleſári, I would comprehend all three under the title of Minêans. At leaſt, to my conception it is clear, that Ptolemy, Pliny, and Strabo, all point to ſomething farther ſouth than Mecca.

Whether this opinion will meet with the approbation of others, is dubious; ſuch as the obſcurity and contradiction of my authorities will allow, I give it. If Najeran be a fixed point, and concluded, we have ground to ſtand on; if it can be diſputed, I am ready to embrace any aſſumption that may be ſupported upon better proofs. What the Rhamanítæ of Strabo, or Calingii of Pliny, may be, ſeems impoſſible to determine. Goſſellin concludes, that the Rhamanítæ of Strabo are the Manítæ of Ptolemy: it is the ſtrength of his argument; and in Mercator's Map, the Manítæ are placed on the north of Mecca. But perhaps Mercator is miſled, for we have no latitude of the Manítæ; and the text ſays, below the Manítæ [115] is the interior Myrrh country, and then the Minêans, a great nation. I have not yet met with any account of myrrh in Hejaz, and therefore, if the Rhamanítæ and Manítæ are the ſame, I conclude that they are

[113] Arabie, ii. 114.
[114] Pages 48, 49.
[115] Ὑπὸ τὰς Μανίτας; ἡ ἐντὸς σμυρνοφόρος, εἶτα Μινᾶιοι μέγα ἔθνος.

in Yemen. But the whole of this is conjectural; and, if names avail, I might with equal propriety contend, that Rhaman is Haman, or Hamdan, the tribe converted by Ali, the position of which answers; or assert, that Cari-Peta is Carni-Peta, correspondent to the Carna [126] or Carana of Strabo, which he says was the capital of the Minêans.

Is it not reasonable to suppose that the army moved in the track of the caravans [127]? and as the line here assumed is direct between Hejaz and Hadramaut, and cuts the province of the Minêans, who were the regular carriers between both, does not this supposition solve more of the difficulties than any other? It is but a supposition at last; still, where our ignorance of the country renders every effort dubious, a rational hypothesis is all that can be expected.

Najeran [128] itself is in Hejaz, for it is one of the fortresses of Mecca, according to Al Edrissi; and the boundary of this province and Yemen, is fixed at the following station. If, therefore, Gallus

[126] I have a leaning towards the connection of these two names; but if the two places be the same, the difficulty is not removed; for the same city cannot be taken, and not taken; and the expedition cannot terminate at two different places. The following circumstances, however, may be curious, if not convincing:

The four great nations in Arabia Felix, or Yemen, were the Minêans, the Sabêans, the Katabanians (who are in the Maphartis of the Periplûs), and the people of Hadramaut. As the power of the Sabêans declined, the tribe of Hamyar (the Homerites) prevailed, whose capital was Aphar, Saphar, or Dafar; but the capital of the Minêans was Karna, or Karana. Μινναῖοι . . . . . πόλις αὐτῶν ἡ μεγίστη Κάρνα, ἡ Καρανά. Strabo, 768. I ask curiously, but without affixing any importance to it, may not the Karipeta of Pliny be Karni-Petra, the fortress of Karna? If this could be supposed, Mariaba, or *the capital*, is identified with Karni-Petra; for both are the principal city of the Minêans.

[127] Strabo has pointed this out, under the supposition that Gallus might have marched by the caravan-road through Petréa. Λευκὴν κώμην, ἐις ἣν . . οἱ καμηλέμποροι τοσούτῳ πλήθει ἀνδρῶν καὶ καμήλων ὁδεύουσιν ἀσφαλῶς καὶ ἐυπόρως ἐις πέτραν ἐκ πέτρας, ὥστε μὴ διαφέρειν μηδὲν στρατοπέδου. The camels and men in the caravans find supplies from fortress to fortress, in the same manner as an army.

[128] El Edrissi, p. 49.

was

was nine days in returning hither after his repulſe, we may ſuppoſe that he would not march leſs than fifteen miles a day on ſuch an emergency: this requires that he ſhould have advanced upwards of an hundred miles into Yemen. And if we date from Najeran the ſixty days employed in his retreat to Nera, an eſtimate between twelve and fifteen miles a day would enable him to reach that port in the time aſſigned. This ſeems a great exertion for ſixty [129] days continuance; but famine impended, and doubtleſs the Arabs hovered in the rear; add to this, that when the army arrived in Egypt it was completely ruined, as Strabo informs us, by famine, hardſhip, ſickneſs, and the difficulties of the march.

Nera, as it is the termination of the expedition, I ſhould have been glad to fix, but no repreſentative offers; it muſt be within the limits of Petrêa, and it ſhould be placed as far below Leukè Komè as the province will admit: it may perhaps be diſcovered by ſome future Niebuhr; or an enlarged knowledge of the language, and the country, may ſhew that we are all pilots at ſea, without inſtruments, charts, or compaſs.

We are now to return to the coaſt, on which, as has been already noticed, the Periplûs mentions only the Canraites, Burnt Iſland, Mooſa, and Okélis. The Canraites are the wild tribes on the broken ſhore of the Hejaz, terminating about Haſſan Iſle, in lat. 25°. And the paſſage from Leukè Komè to the Burnt Iſland was conducted with a view of avoiding the coaſt throughout. How this could be effected during a run of from ten to twelve degrees, or more, is not eaſily accounted for; but one of theſe diſtances it muſt

[129] But it agrees with a ſimilar route from Thomna to Gaza, mentioned by Pliny, which required 65 days. Lib. xii. 32. Hardouin.

bc,

be, according as we aſſume Gebel Tar, or Gebel Zekir, for Katakekáumenè, or the Burnt Iſland; and as both preſerve at preſent the ſigns of volcanoes in decay; one of them it muſt be, as may ſuit beſt with other circumſtances mentioned. The extreme diſtance is from Moilah, in lat. 27° 56′ [130] to Gebel Zekir [131], in 13° 50′; the ſmalleſt, from Haſſan Iſle, in 25°, [132] to Gebel Tar, in 15° 10′. If Mokha is aſſumed for the repreſentative of Mooſa, and Mooſa be the only object of the ancients, Gebel Zekir muſt be preferred; or if we ſuppoſe that the ancients wiſhed to approach the coaſt, as ſoon as they found the natives more civilized, we ſhould rather be directed to Gebel Tar [133]: for in that latitude, and even to the north of it, we are to fix the Sabêans generally, in the ſame manner as Niebuhr extends the dominion or influence of the modern Sana. Sana in fact, under the government of its Imam [134], as it comprehends nearly the ſame territory as the ancient Sabêa, ſo does it partake of the manners and habits attributed to that nation, where commercial intercourſe had ſoftened the Arabian character, and introduced

[130] Making 14° 6′.

[131] Notwithſtanding the diſagreement of M. d'Anville and M. Goſſellin, no one can ſearch this queſtion thoroughly without reference to the diſſertation of the former on the gulph of Arabia. I have collected materials from both; from P. Sicard, Irwin, Bruce, and De la Rochette's beautiful chart. If I prefer the latitudes of the laſt to all others, it is becauſe they are founded more eſpecially on obſervations made by Engliſh navigators, and the officers on board the ſloops, packets, and trading veſſels in that ſea. are, for the moſt part, ſcientific men, and better qualified to determine nautical queſtions than any navigators who have preceded them.

[132] Making 9° 50′.

[133] Jibbel Tier is the point from which all ſhips going to Jidda take their departure after ſailing from Mocha. Bruce, i. p. 341. This, though the courſe is the direct contrary to that of the Periplûs, ſtill marks it as a point of departure and deſtination.

[134] This is evident, from Barteman in Ramuſio, the French Voyages in 1721, by La Rocque, and Niebuhr. The government of the Imam is much more gentle than any Mooriſh government in Africa or Arabia; the people, too, are of gentle manners, the men, from early age, being accuſtomed to trade. Bruce, i. 367.

troduced

troduced that ſecurity of life and property, without which commerce itſelf cannot exiſt.

Mooza, according to the Periplûs, was the regular mart [135] of the country: it was not a harbour, but a road with a ſandy bottom, which afforded good hold for the anchors [136], and where the ſhips lay in great ſecurity: it was inhabited wholly by Arabians; and was frequented on account of the Indian trade with Barugaza, as much as for its native produce.

The intercourſe with the Sabêans had from the firſt been eſtabliſhed, either here or at ſome mart in its vicinity; but the Sabêans were now no longer the prevailing tribe; the Homerites, who came from Mareb, were become the ſuperior power, and Charibáel the ſovereign of both nations. He had fixed the ſeat of his government at Aphar, ſuppoſed by Goſſellin to be the ſame as Dafar or Safar; and Dafar is noticed by Niebuhr as a place near Mount Sumara, now in ruins. The diſtance, however, does not anſwer; for Aphar is placed by the Periplûs thirteen days inland from Savè, and Savè three days from Mooſa. But if Savè is the ſame as Taas, or Mount Sabber, the diſtance from Sabber to Daſar is not much more than from Mooſa to Sabber; and thirteen days from Sabber inland would carry us much nearer to Sana, the modern capital of the Imam, and the metropolis of Yemen.

It is poſſible, that in a country ſubject to perpetual revolutions, provinces may have obtained different names from the tribes that occupied different ſituations: this ſeems apparent in the diſtrict of Cátaba, which is now inland ſixty miles from the coaſt, notwith-

[135] ἐμπόριον νόμιμον, the port eſtabliſhed by the native government.

[136] Bruce mentions the ſame circumſtance of the road of Mokha. The cables, he ſays, do not rub, becauſe the bottom is ſand, while it is coral in almoſt every other part.

ſtanding

ſtanding that Strabo places the Catabanians immediately at the ſtraits. It may be, therefore, preſumption to ſay, that Savè is Sabber [137], or Aphar, Daſar; notwithſtanding that the territory of Maphartis [138] at Savè, or the capital of the Homerites thirteen days inland, may afford us general information ſufficiently correct. Cholêbus, the ſovereign of Maphartis, whoſe reſidence is at Savè, is ſtyled a tyrant by the Periplûs, that is, a prince whoſe legitimate title was not acknowledged; but Charibáel is the genuine [139] ſovereign of the Homerites and Sabêans. The power of Cholêbus extended over the ſouth-weſt angle of Yemen, both within and without the ſtraits, occupying the ſame tract as the Catabanians of Strabo in a former age. And Cholêbus had a joint power [140] with the ſubjects of Charibáel at Mooſa, over the ſettlement at Rhapta, on the coaſt of Africa.

The mart of Yemen, at the preſent day, is at Mokha, where coffee is the grand article of exportation, on which the Imam of Sana [141] receives a duty of twenty-five per cent. equivalent to the cuſtom exacted by the Romans at Leukè Komè ſeventeen hundred years ago. Twenty miles inland from Mocha, Niebuhr diſcovered a Mooſa ſtill exiſting, which he with great probability ſuppoſes to be the ancient mart, now carried inland to this diſtance by the accretion of the coaſt. And if the accretion is allowed, certainly

[137] Niebuhr has a conjecture alſo relating to Sabba and Zebid, tom. ii. p. 55.

[138] Periplûs, p. 13.

[139] ἐνθεσμος βασιλεὺς. Perip. p. 13.

[140] So I interpret a paſſage (p. 10. of the Periplûs) νέμεται δὲ αὐτὴν (τὴν χώραν) κατὰ τι δίκαιον ἀ, χαῖον ὑποπίπτησαν τῃ βασιλείᾳ τῆς πρώτης γινομένης Ἀραβίας, ὁ Μοφαρίτης τύραννος Παρὰ δὲ τῷ βασιλέως ὑπόφορον αὐτὴν ἴσχουσιν οἱ ἀπο Μύσα. I underſtand by this, that Τύραννος means Cholêbus, and βασιλέως Charibáel; and that the merchants of Mooſa, who were ſubjects to Charibáel, received a tribute from Rhapta, while Cholêbus had the civil adminiſtration of the ſettlement. Μοφαρίτης τύραννος, is the Tyrant of Maphartis. Mophartis and Maphartis differ no more than Dofar and Dafar, in the pronunciation of which Niebuhr ſays he could perceive no difference.

[141] Niebuhr, who cites Pliny, lib. xii. c. 35. for another inſtance: Regi Gebanitorum quartas myrrhæ partes pendunt.

no

no ſituation can be aſſumed more correſpondent to the ancient authorities.

At Mooſa, the IMPORTS ſpecified are theſe:

Πορφύρα [142] διάφορος καὶ χυδαία,	Purple Cloth, fine and ordinary.
Ἱματισμὸς Ἀραβικὸς χειριδωτὸς ὁ τε απλῆς καὶ κοινὸς καὶ σκοτυλάτος,	Cloaths made up in the Arabian faſhion, with ſleeves, plain and common, and *(ſcutulatus)* mixed or dappled.
Κρόκος, - - - -	Saffron.
Κύπερος, - - - -	Cyperus. Aromatic Ruſh.
Ὀθόνιον, - - - -	Muſlins.
Ἀβόλλαι, - - - -	Cloaks.
Λώδικες δ' πολλαὶ ἁπλοῖ τε καὶ ἐντόπιοι,	Quilts, a ſmall aſſortment; ſome plain, and others adapted to the faſhion of the country.
Ζῶναι σκιωταὶ, - - -	Saſhes, embroidered, or of different ſhades.
Μύρον, - - - -	Perfumes.
Χρῆμα ἱκανὸν, - - -	Specie for the market, or in conſiderable quantity.
Οἶνος τε καὶ σῖτος δ' πολὺς -	Wine and Corn, not much. The country produces ſome corn, and a good deal of wine.

EXPORTS:

Σμύρνα ἐκλεκτὴ, - - -	Myrrh, of the beſt quality.
Στακτὴ ἀβειρμιναία, [143] -	Stactè, or Gum.
Λύγδος, - - - -	White Stones. Alabaſter.

[142] The modern articles of import and export may be ſeen in Niebuhr, tom. ii. p. 52.

[143] A doubtful reading; but probably containing Μινάια, *i. e.* from the country of the Minæi.

Added to theſe were a variety of the articles enumerated at Adûli [144], which are brought over from Africa and ſold here. But there were likewiſe ſeveral others imported as preſents both to Charibáel [145] and Cholêbus; ſuch as horſes, mules, gold plate, and ſilver emboſſed, robes of great value, and braſs ware of various kinds. Of theſe it may be preſumed that Charibáel had the largeſt ſhare; for to him embaſſies [146] were frequently addreſſed, and he was conſidered as the friend of the Roman emperors.

The importance of this commerce, as it appears in the Periplûs, is manifeſtly far inferior to the repreſentation of it in Agatharchides; and the trade of the Sabêans declining, after the fleets from Egypt found their way to India direct, was probably not only the cauſe of their impoveriſhment, but of their ſubjugation alſo by the Homerites. Still it is evident that the manners of the people in this quarter of Arabia were civilized; that the government was conſiſtent, and that the merchant was protected. This character, as we learn from Niebuhr, Yemen ſtill maintains, in preference to the Hejâs, and the whole interior of the peninſula. The ſame ſecurity is marked as ſtrongly by the Periplûs in Hadramaut; and the whole coaſt on the ocean being commercial, the intereſts of commerce have ſubdued the natural ferocity of the inhabitants.

It is a circumſtance foreign to the object of the preſent work, but ſtill curious to remark, that in the age previous to Mahomet, Yemen

[144] Coffee and frankincenſe are the chief of the native exports at preſent, with myrrh, ivory, and Abyſſinian gold from Maſſua, anſwering to the ancient Adûli.

[145] Τῷ τε βασιλεῖ καὶ τῷ τυράννῳ.

[146] Συνεχέσι πρεσβείαις καὶ δώροις φίλος τῶν αὐτοκρατόρων, *may* be rendered as expreſſing, that *by frequent embaſſies and preſents he had obtained the title of Friend of the Emperors*, an honour formerly conferred upon ſovereigns in alliance with Rome, by a vote of the ſenate. Maſiniſſa, Eumenes, and Arioviſtus, were ſtyled *Amici* Populi Romani. But I have preferred the rendering in the text, becauſe the preſents *from* Rome are ſpecified.

was

was in the poſſeſſion of the Abyſſinians, whoſe power terminated with his birth; and that in the ſhort period [147] which intervened between his aſſuming the prophetic office and the Caliphat of Abubecre and Omar, all this part of Arabia was, almoſt without an effort, ſubjected [148] to their power. In the ſixteenth century the Turks were maſters of the coaſt, and ſome places inland, but were driven out by the founder of the preſent dynaſty, Khaſſem el Ebir, whoſe poſterity aſſumed the title of Imam, and fixed their reſidence at Sana, the preſent capital of Yemen, which cannot be very diſtant from the ancient metropolis of Sabêa.

On this coaſt, the firſt fleets that ſailed from Egypt met the commerce from India. Agatharchides ſeems to ſay, that the ſhips from Perſia, Carmania, and the Indus, came no farther than the coaſt beyond the ſtraits; and that the fleets from Egypt received their lading without paſſing them. Now the fleet from Carmania and the Indus could not reach Arabia without experiencing the effects of the monſoon, as Nearchus had done; and the knowledge of this once obtained, could not be loſt. We cannot go farther back, hiſtorically, than the journal of Nearchus; but in that we find manifeſt traces of Arabian navigators on the coaſt of Mekran, previous to his expedition. And whether the Arabians ſailed from Oman or Sabêa, it is ſtill a proof that the monſoon muſt have been known to them before the time of Alexander; and a high probability that they had reached the coaſt of Malabar, or that veſſels from that coaſt had reached Arabia, from the earlieſt ages.

[147] Niebuhr, tom. ii. p. 10.

[148] Yemen ſeems to have been converted before Mahomet's death, if we credit the account of Ali's miſſion and ſucceſs. But the acceſſion of the ſtrongeſt and richeſt provinces of the peninſula, of the more civilized to the more barbarous, is one of the obſcureſt facts in the early hiſtory of the Mahomedan power.

The diſtance from Mooſa to Okêlis is ſhort of forty [149] miles. Okêlis has a bay immediately within the ſtraits; and at this ſtation the fleets which ſailed from Egypt in July, rendezvouſed [150] till they took their departure the latter part of Auguſt, when the monſoon was ſtill favourable to conduct them to Muzíris, on the coaſt of India. For Okêlis we have Okíla [151] in other ancient authors, and Ghella is the name it bears at preſent. D'Anville has marked it ſufficiently in his Ancient Geography; and in Capt. Cook's [152] chart, which is upon a large ſcale, the entrance of this bay is two miles [153] wide, and its depth little ſhort of three. Added to this, if it is conſidered that the projection of the Bab-el-Mandeb point is a complete protection [154] againſt the contrary monſoon, we find here all the conveniences [155] that were requiſite for a fleet conſtructed like thoſe of the ancients.

[149] 300 ſtadia, Peripl. equal to 37½ miles, or, at 10 ſtadia to the mile, 30 miles.

[150] See ſupra, pp. 37. & 75.

[151] Αχίλα, text; Ωκίλα, marg. Strabo. P. 769. he calls the promontory by this name.

[152] It has been already noticed, that the Capt. Cook here mentioned commanded a ſloop in the India Company's ſervice, about the year 1774. His ſcale is very large, and conſequently I have been enabled to view this bay more diſtinctly than in d'Anville's map, or De la Rochette's chart; and had I been poſſeſſed of Capt. Cook's chart when I deſcribed the Bay Avalites (p. 115.), I ſhould not have been at a loſs to aſſign its form and limits: it appears there in perfect conformity with the Periplûs. Such is the advantage of a large ſcale, and ſuch is the correſpondence of modern intelligence with ancient authorities, when we can obtain it in detail.

[153] De la Rochette marks this bay, and adds, that it is ſtill navigable by boats; a ſufficient proof that it was practicable for an Egyptian fleet ſeventeen centuries ago.

[154] Between Cape St. Antony and Babel Mandeb the land is low along ſhore, forming a deep bay, which makes the Cape (Babel Mandeb) appear detached. Oriental Navigator, p. 152.

[155] Having paſſed the ſtrait, it is neceſſary to anchor: you muſt ſhut up the ſtraits, and anchor a little to the northward of Cape Bab-el-Mandeb, where the water is *always ſmooth*. Oriental Navigator, p. 152.—*N. B.* This is at the entrance of the Bay of Okêlis.

X. STRAITS OF BAB-EL-MANDEB, ANCIENT NAVIGATION OF SESOSTRIS.

THE paſſage of the ſtraits, and entrance into the ocean, had been conſidered poſſibly as great an atchievement by the natives, on both ſides of the Gulph of Arabia, as the voyage of Hercules through the Straits of Gades to the Garden of the Heſperides, by the Greeks. Fabulous accounts conſequently attached to both; and the paſſing of Bab-el-Mandeb was as naturally attributed to Seſoſtris, as the voyage through the Straits of Gibraltar to Hercules. Diodôrus ſays, that Seſoſtris [156] ſent a fleet of four hundred ſhips into the Erythrêan Sea, and ſubdued the iſlands, and all the maritime countries as far as India. Heródotus is much more moderate; and mentions only, that Seſoſtris commenced his expedition from the Gulph of Arabia, and ſubdued the nations bordering on the Erythrêan Sea, till he met with ſhoals [157], which oppoſed the farther progreſs of his fleet.

But as we are now arrived at the ſtraits, I ſhall introduce a table comprizing the moſt material authorities of the ancients, compared with each other, and with the different concluſions of the moderns. A final deciſion on the points diſputed, or actual preciſion in the preſent attempt, are not to be expected; but a probable adjuſtment of near twenty names to their reſpective poſitions, will afford the reader a general view, which will enable him to form a judgment for himſelf.

[156] Diod. lib. i. p. 64. ed. Weſſel.

[157] Herod. lib. ii. p. 149. ed. Weſſel.

TABLE

TABLE of PTOLEMY's Catalogue for the Eaſtern Side of the Gulph of Arabia, compared with other Geographers, ancient and modern.

The firſt Latitude of Ptolemy is according to the Latin Text; the ſecond, according to the Greek.

* Denotes Poſitions ſuppoſed to be aſcertained. R. Latitudes from De la Roche.

PTOLEMY.	AGATHARCHIDES.	DIODORUS.	STRABO.	D'ANVILLE.	GOSSELLIN.	PERIPLUS.
I. Kluſma Garriſon 28° 50′ 28° 10′		Icthyophagi, lib. 3. c. 40. p. 208. in whoſe country the ſea retreated. Troglodytes.		Clyſma 9 27′ Phihahiroth. Sicard.		* Clyſma 29° 40′ R.
II. Arsinoè 29° 10′ 29° 20′		Poſidion. Under this name Diodôrus comprehends the ſea of Suez.		Arſinoë 29 46′ Cleopatris. Suez.	Clyſma. Suez. Colzum.	* Suez 29 58′ R.
III.	Phoenicôn.	Phoenicôn.	Phoenicôn.	Elim of Exod xxv 27. el Tor. 28° 10′	Elim. Tor. Raithum	* Tor 28 11′ R.
IV.	Neſſa is not an Iſland in Agatharchides	Iſland of Phocæ, deſcribed with the properties of Nêſſa.	Iſland of Phocæ	El Cab.	Sheduwan.	* Sheduwan Iſland 27 24′ R.
V. Pharan - 28° 30′ 28 10′	Promontory.	Promontory.	Promontory.	Ras Mahomed.	Ras Mahomed.	Ras Mahomed 27 47′ 5″ R.
VI. Elana - 29 0′ 28 15′ City - 26 15′ 29 15′	Laianitick Gulph.	Laianitick Gulph.	Elanitick Gulph.	Aila. Elath. Haila. 29 30′	Aila Acaba Ila.	* Elath 29° 15′ 5″ R.
VII.				Acaba. Ezion Geber.	Acaba.	* Acaba 29° 10′ R.
VIII. Onnè 28° 40′ 28 30′						
IX. Modiana 27 45′ 27 45′	Batmizôminêis.	Banizomenes.	Hunters.	Magar Schuaib. Jethro the Midianite	Magar Schouaib.	* Madian or Midian.
X. Hippos, Mount - 27 20′ Town 26 40′ 26 10′					Bull's Horns Irwin. But S. of Moilah	Bull's Horns. Irwin, p. 143. vol i. oct.
XI. Phenicôn 26° 20′ 26 20′				Calaat el Moilah.	Moilah. Leukè Komè.	* Leukè Komè. White Village. 27° 56′ R.
XII.	Three Iſlands: 1. Sacred to Iſis. 2. Sookabua. 3. Salydo.	Three Iſlands. One ſacred to Iſis.	Three Iſlands.			* Three Iſlands. Irwin 28 4′ R. 1. Tiran. 2. Barkan. 3. Sanafer.
XIII. Rhaunathi Village 25° 40′ 25° 40′	Dangerous coaſt, ends at Haſſan, lat 25 R.	Dangerous coaſt. Echinades.	Dangerous coaſt, 1000 ſtades.	Rouniè.	Dangerous coaſt.	* Dangerous coaſt. Kauraites.
XIV.				Hawr White Village, 25 d'Anville		Hawr, ſame lat. as Haſſan Iſld 25 R.
XV. Cherſoneſe Promontory 25° 20′ 25° 10′	Coaſt with water.	Cherſoneſus.	Cherſoneſus.	Ras Edom 24° 5′	Ras Uaned 25° 10′ poſſibly Ras Mahar 24 32′ R.	Ras Reghab? lat. 24 13′ R. under which, Jeraboop

XVIII. Arga Village 22° 40′ 22 20′					Rabagh Gadirkom 22° 50′	
XIX. Zaaram Capital 22 0 22 0′						Tfafna? 23° 30′ R.
XX. Kentos Village 21 30′ 21° 30′					Giddah.	
XXI. Thebæ City - 21° 0′ 21° 0′	Dedebæ.	Debæ.	Debæ, from דהב, Dahab, Gold.	Province of Mekka. Maco-raba of Ptoly 22° 0′	Mekkans.	* Mekka 21° 32′ R. Province of Mekka. Mecca, lat. 21° 40′
XXII. Bœtius River 20° 40′ 20° 20′				Bardilloi.	Sockia.	* River Charles. Ibhar Obhar 21° 39′ R
XXIII				Giddah 21° 34′ Port of Mekka.		* Giddah. Port of Macoraba.
XXIV. Badeo Capital 20 15′ 20° 20′				Ras Bad. Avad 21° 25′	Serrain.	Giddah Head 21° 28′ R.
XXV. Ambe City - 19 15′ 19° 30′						Gedan? Ziden?
XXVI. Kaffanites	Alilei. Kaffandrini.	Gafindois. Alilæi.	Gold Coaft.	Ghezan 16° 48′ R.	Beni Halil.	Gedan, or Ziden, 20° 44′ R.
XXVII. Mámala Village 18° 10′ 18° 10′						Ras Hali? 18 0′ Limit of Hejaz and Yemen 18 37′ R.
XXVIII. Adédi Village 17 10′ 17 10′						Caffanites terminate perhaps at Ras Ghefan.
XXIX. Elifari on the coaft. Minæi inland.						Elifari commence from about Ras Ghezan, lat. 16° 30′ to Mo za.
XXX. Puani City - 16 30 16° 10′						
XXXI. Pudni City 16 30 16° 10′						
XXXII. Æli Village 15° 30′ 15° 10′				Ras Hali, lat. 19° 0′	Loheia 15° 30′	bay below Loheia? Iſland Gebel Tar 15° 10′ 15° 40′ R.
XXXIII. Napegus Village 15 0′ 15 0′						Hodeida? retembles Adedi in ſound, but not in poſition.
XXXIV. Sacatia City 14 30 14° 30′						Al Sharga? Iſland Gebir Zekir 13° 50′ 14° 0′ R.
XXXV. Mooſa Mart 14 0 14 0′	Sabæa.	Sabæa.	Sabæa.	Mooka.	Muza, from Niebuhr 6 leagues inland	* Muza 13° 0′ Mokha 13° 18′ R.
XXXVI. Sosippi Port 13 0 13 0′						
XXXVII. Pſeud Okelis 12° 30′ 12 30′						
XXXVIII Okelis - 12 0′ 12° 0′				Ghella.	Ghella.	* Ghella Bay 12° 48′ R.
XXXIX. Palindromos Promy 11° 40′ 11° 20′				Bab-el-Mandeb.	Bab-el-Mandeb 12° 39′ 20″ Bruce.	* The Babs. Pilot's Iſld 12° 44′ R.

If the ſhoals of Heródotus have any foundation in fact, they are connected with the Bay Avalítes [158], on the African ſhore, immediately beyond the ſtraits, where mention is made both by Strabo and the Periplûs, that the veſſels employed in later ages put their lading into boats in order to trade with the natives; but this is hardly intended by Heródotus, though his deſcription has confined him within narrower limits than thoſe of Diodôrus.

This, however, we obtain at leaſt from the account before us, that in the age of Heródotus it was a prevailing opinion, that the paſſage had been made in the moſt remote ages; and if the Egyptians ever were navigators, there can be no objection to admit them into a participation of the commerce with Arabia, or extending that commerce as far as the Arabians did towards the eaſt. Few other hiſtorical documents, however, of the fact appear, farther than may be collected from the circumſtances here recorded, and theſe are both few and deficient.

To what extent the paſſage of the ſtraits, and progreſſively, the voyage to India, were accompliſhed, has been already ſufficiently ſhewn; but that it was always conſidered as a moſt extraordinary attempt by all thoſe who had not perſonally made it, we want no other teſtimony than that of Arrian, the hiſtorian of Alexander. He aſſerts, that no one had gone round the whole coaſt, from the Arabian into the Perſian [159] Gulph, though perhaps ſome few had paſſed from one to the other by ſtriking out into the open ſea [160].

[158] Perhaps the Saſus of Coſmas, but dubious; for his Saſus ſeems to be rather on the coaſt of Adel, or Barbaria. See Melch. Thevenot, p. 7. Coſmas.

[159] This is in ſome meaſure true at this day; for the weſtern coaſt of the Gulph of Perſia has been little viſited. Capt. Hamilton's is the beſt account I have ſeen.

[160] Lib. viii. p. 358. ed. Gronov. See the note of Gronovius on this paſſage, p. 356.

Now

Now Arrian lived in the reign of Adrian; and Hippalus had laid open the track to India, at leaſt fourſcore years before Arrian wrote: ſo little was known in the northern part of the empire of what was going on in the ſouth.

Okêlis was not a mart of commerce, but a bay with good anchorage, and well ſupplied with water: it was ſubject to Cholêbus [161]. The neighbouring headland of Bab-el-Mandeb, which forms the entrance of the ſtraits, is placed in lat. 12° 39′ 20″ by Bruce, and the ſtraits themſelves are ſaid to be only ſixty ſtadia, or ſeven miles and a half wide, or ſix miles, if we reckon ten ſtadia to the mile. This is very near the truth, if we meaſure from Bab-el-Mandeb to Perim, which the Periplûs calls the Iſland of Diodôrus; while the whole breadth, from the Arabian to the African ſide, is nearly five-and-twenty [162]. Perim, or Mehun, was taken poſſeſſion of by the Britiſh, when the French were in Egypt, and begun to be fortified; but it has no water. It is not the only iſland in the ſtraits; for there is another called Pilot's Iſland, cloſe to the Arabian ſhore; and on the African ſide eight more, bearing the name of Ageſteen.

The wind in this paſſage is deſcribed as violent, from its confinement between the high lands on both ſides; and the opening of the ſtraits gradually towards Fartaque and Gardefan, is ſtrongly [163] marked in the Periplûs.

The firſt place to which we are directed beyond the ſtraits, is a village called Arabia Felix: its diſtance is eſtimated at an hundred and twenty miles from Okêlis; and it was formerly a city of im-

[161] Κώμη τῆς αὐτῆς τυραννίδος; of the Uſurper's Country.

[162] Bruce conjectures ſix leagues Cook's Chart makes it near 25 miles. Bruce, i 315.

[163] Διαγομένης πάλιν τῆς θαλάττης ἐς ἀπόλυσιν καὶ κατὰ ΜΙΚΡΟΝ ἐς πέλαγος ἀποβαινομένη· opening by degrees from the ſtraits to the two capes.

portance before [164] the fleets paſſed from India to Egypt, or from Egypt to the countries towards the Eaſt [165]. Previous to that time, the fleets from Egypt and the Eaſt met in this harbour, which was the centre of the commerce, as Alexandria was afterwards for all that paſſed through Egypt into the Mediterranean. This harbour was more commodious than Okêlis, and afforded better anchorage, as well as better convenience for watering, than Okêlis. The town ſtands at the entrance of the bay, and the retiring of the land inwards affords protection to the ſhipping. Reduced as it was in the author's age, by the different channel into which the commerce had been directed, the village was ſubject to Charibáel, and had within a few years been taken and deſtroyed by the Romans.

XI. ADEN.

EVERY circumſtance in this minute deſcription directs us to Aden: the diſtance, the harbour, and the name [166], all correſpond; and the peculiarity of its being under Charibáel, while Okêlis was poſſeſſed by Cholêbus, marks the extent of the Homerite dominions, ſurrounding Maphartis in the angle of the peninſula. The native ſheiks, or heads of tribes, at the preſent day, are perfect repreſentatives of Cholêbus. When Niebuhr was in Arabia, the ſheik of

[164] Εἰς τὴς ἴσω τόπους.

[165] In the middle ages, the India trade had reverted into its original courſe: Ex ipſa ſolvuntur navigia Sindæ, Indiæ, et Sinarum, et ad ipſam deferuntur vaſa Sinica. Al Edriſſi, p. 25.

The Arabs diſtinguiſh between Cheen and Ma-Cheen: the firſt is Cochin China; and the other, China. The porcelain mentioned ſeems to imply, that *Sinarum* uſed here means the real Chineſe, and that they traded ſo far weſt in that age. Sindæ and Indiæ expreſs Scindi and Hindoſtan.

[166] Aden ſignifies deliciæ. Huet.

Aden

Aden was no longer ſubject to the Imam of Sana, but had aſſerted his independence, and poſſeſſed a ſmall territory in the neighbourhood of the city.

The capture alſo and deſtruction of this village by the Romans, a ſhort time previous to the author's age, would be a natural conſequence of the progreſs and extenſion of the Roman commerce from the Red Sea to India; and, as Claudius collected a tribute from the maritime towns of Arabia, it is natural to ſuppoſe that he was the Ceſar mentioned in the Periplûs, who ordered this place to be deſtroyed, for the purpoſe of ſuppreſſing every power that might interfere with the Roman commerce, or divert a ſhare of it into its ancient channel. It is trüe this muſt have been an act of oppreſſion upon Charibáel, who was the ally and friend of the Roman emperors; but far greater ſacrifices of their juſtice to their ambition occur in the hiſtory of thoſe ſovereigns of the world. Was it not the ſame policy which induced Soliman, emperor of the Turks, when he ſent Soliman Pacha from the Red Sea to ſuppreſs the riſing power of the Portugueſe in India; when, under pretence of delivering the Mahomedan Powers from this new and unexpected intruſion of the Chriſtians, he employed the forces which had been collected on the occaſion in ſeizing on the maritime towns of Arabia? It was then that Soliman Pacha obtained poſſeſſion of Aden by treachery, and hanged the ſheik at the yard-arm of his ſhip [167].

I conjecture that it was Aden which Agatharchides deſcribes without a name, when he places a city on his White Sea without

[167] Viaggio di un comito Venetiano. Ramuſio, tom. i. f. 276. anno 1538.

This Venetian captain was put in requiſition at Alexandria, and ſent to Suez to ſerve under Soliman Pacha. He was preſent at the execution of the ſheik, and deſcribes the Indian trade at Aden as then conſiſting of only three or four ſpice ſhips in a year.

the ſtraits; from whence, he ſays, the Sabêans ſent out colonies or factories into India, and where the fleets from Perſis, Carmania, and the Indus, arrived. He ſpecifies large ſhips employed for this purpoſe; and though his mention of iſlands may ſuggeſt an idea of Socotra, Curia Muria, and the coaſt of Oman, it ſeems far more probable that his intelligence was imperfect, and that theſe fleets, which he deſcribes, muſt have been found in the ſame port which the Periplûs aſſigns them, as long as the monopoly continued in the hands of the Sabêans.

The teſtimony of Agatharchides is, in one point, highly important; for it is the firſt hiſtorical evidence to prove the eſtabliſhment of Arabian coloniſts, or rather reſident factors and merchants, in the ports of India: it is a fact in harmony with all that we collect in later periods, from Pliny, and the Periplûs, and Coſmas; and we may from analogy conclude, that it was equally true in ages antecedent to Agatharchides; that is, as early as we can ſuppoſe the Arabians to have reached India. The ſettlement of their own agents in the country was moſt convenient and profitable, while the manners and religion of India created no obſtacle to the ſyſtem.

In the middle ages, when the power of the Romans was extinguiſhed, and the Mahomedans were poſſeſſed of Egypt, Aden reſumed its rank as the centre of the trade between India and the Red Sea. The ſhips which came from the Eaſt were large, like thoſe which Agatharchides deſcribes: they did not paſs the ſtraits, but landed their cargoes at this port, where the trankies [168] or germes of the Arabs, which brought the produce of Europe, Syria, and Egypt,

[168] M. Polo uſes the expreſſion *Zerme*. The Arabs of Renaudot mention the ſame circumſtance, that the ſhips from the Eaſt did not enter the Red Sea.

received

received the precious commodities of the Eaſt, and conveyed them either to Aſſab, Koſir, or Jidda; when all that paſſed into Europe, ſtill came to Alexandria, and enriched the Soldan's dominions by the duties levied, and the profits of the tranſit. In this ſituation, Marco Polo found Aden [169] in the thirteenth century; and the account he gives of the wealth, power, and influence of Aden, is almoſt as magnificent as that which Agatharchides attributed to the Sabêans in the time of the Ptolemies, when the trade was carried on in the ſame manner.

So far as the identity of Aden and Arabia Felix, there is neither difficulty nor diſagreement; but upon the remainder of this extenſive coaſt, from Aden to the Gulph of Perſia, there will be few poſitions in the following detail which will accord with d'Anville's arrangement, or with that of other commentators who have beſtowed their attention upon the Periplûs.

XII. ARRANGEMENT OF THE COAST OF ARABIA ON THE OCEAN.

The circumſtance upon which the whole depends, is the adjuſtment of Syágros. In common with others, I had ſuppoſed its repreſentative to be the modern Ras-el-had; and there is ſo much to induce this opinion, that I abandoned it with great reluctance, and ſhall perhaps find great difficulty in perſuading others that it is erroneous.

The Periplûs notices Syágros as pointing to the Eaſt, and as the greateſt promontory in the world. Omana likewiſe is men-

[169] M. Polo, lib. iii. c. 39. the ſoldan of Aden ſent 30,000 horſe and 40,000 camels, to aſſiſt at the ſiege of Acre, in the year 1200. Such a ſoldan as this might be the Imam of Sana.

tioned with it, anſwering to the preſent Oman; and Moſcha, ſeemingly identified with Maſkat, the principal port of that province. Under the influence of theſe reſemblances and probabilities, if I had joined in the common ſuffrage, and called Syágros Ras-el-had in my former publications, wherever it occurred, it is conviction alone, and the abandonment of ſyſtem for truth, which compels me to recall the error, and acknowledge that Syágros is not Ras-el-had, but Fartaque.

This is a conceſſion not made for the purpoſe of particular accommodation, but grounded on a general analyſis of all the poſitions on the coaſt, on a combination of all the circumſtances relative to the diviſion of the provinces; and upon a painful re-conſideration of all that was to be undone, and unſettled, after I had fixed my opinions upon the authority of the beſt writers, who had preceded me on the ſubject.

The reader will expect proofs; and the proofs are, that the iſlands round the whole extent of the coaſt on the ocean will now fall naturally into their places, which cannot be effected by any other arrangement. The iſlands in Ptolemy will become relatively conſiſtent with thoſe of the Periplûs; and the Bay Sachalítes, which Ptolemy has been accuſed of tranſpoſing from the weſt to the eaſt of Syágros, is reduced to the different application of a name, inſtead of a difference in point of ſituation.

Sachalítes is univerſally allowed to be the Greek form of expreſſing the Arabick Sahar [170]. Now there are two Sahars on the

[170] Sahar becomes Sachar by enforcing the ſound of the aſpirate, and the change of the final r is analogous in a variety of inſtances; thus, Degel formed into Deger, is the river Tigris of the Greeks; and Sinus Sachal-ites is equivalent to Sachar-ites, the bay of Sachar or Sahar.

coaſt

coaſt of Arabia: one that is almoſt centrical between Aden and Fartaque; and another that lies to the eaſt of Fartaque, between that cape and Cape Morebat or Merbat [171]. In the firſt [172] of theſe there is little variation of orthography; but the other is written Schæhr, Schahr [173], Shahar, Cheer [174], and Seger. They are both frequented as places of trade to this day. And if we ſuppoſe that the firſt Sahar is the Sachalítes of the Periplûs, and the ſecond Shahar, the Sachalítes of Ptolemy, the Syágros of Ptolemy will anſwer to Fartaque as well as the Syágros of the Periplûs, and the two authors will be in harmony with each other.

Further proofs of this reconciliation will be given in our progreſs along the coaſt, and ſome difficulties that attend it will be acknowledged; but if it ſhould be admiſſible or probable upon the whole, much indulgence is due in regard to inferior objections; as, upon the firſt view of the coaſt before us, no two accounts can ſeem more irreconcileable to each other than thoſe of Ptolemy and the Periplûs.

[171] Cape Merbat, called Morebat and Marabout in our charts, is a headland much noticed by our Engliſh navigators: it is one of the principal ſources of frankincenſe; for Al Edriſſi ſays, in montibus Merbat naſcuntur arbores thuris quod deinde in omnes Orientis et Occidentis partes defertur. It is four days, or an hundred miles, from Haſec, and conſequently in the very heart of the diſtrict, which is the Sachalítes of Ptolemy. I obſerve in ſome authors a diviſion of the coaſt into Thurifera Regio, Prior and Ulterior: if this is founded, the Prior would be previous to Fartaque, and the Ulterior to the eaſtward of it; the firſt would be the Sachalítes of the Periplûs, and the latter the Sachalítes of Ptolemy; and reſpectively, the Hadramaut and Seger of Al Edriſſi. But I rather think the diſtinction modern, at leaſt I have not yet met with it in any ancient author. See Al Edriſſi, p. 27.

[172] The firſt Sahar is meant by Niebuhr, as he places it in the province of Jafa, which lies between Aden and Hadramaut; and he writes it Schähr, Arabie. Tom. ii. p. 125. French edition.—It is likewiſe the Eſeier of Marco Polo, 40 miles from Aden. Lib. iii. c. 40.

[173] In the French Voyage, by La Roque 1716, which, with the French pronunciation, is our Engliſh Schæhr, pronounced Share.

[174] Renaudot's Arab calls it Sihar or Shihr, which is the Engliſh Sheer. The produce, he ſays, is frankincenſe. The ſhips of Siraf go to Jidda, but never farther in the Red Sea. Their cargoes are conveyed to Egypt in ſhips of Colſum, the Red Sea, p. 93.

XIII. KANÈ.

THE firſt port to which we are to proceed from Aden, is Kanè [175]; the diſtance is ſtated at two thouſand ſtadia or more, upon a length of coaſt inhabited by Bedouins and Ichthyophagi; and if we eſtimate the number of ſtadia at two hundred miles, the termination falls very nearly at the Cava Canim of d'Anville, or at Maculla Bay, which lies a very few miles to the eaſtward. Our charts take notice of both; and at Cava Canim, which is inſerted principally upon the authority of d'Anville, there appear ſome iſlets, which may be Orneôn [176] and Troolla, deſcribed as deſert iſles by the Periplûs; and which, if they exiſt, identify Cava Canim for Kanè, in preference to Maculla. In point of diſtance, either is ſufficiently exact to anſwer the purpoſe; for Maculla is ſixty [177] leagues from Aden, and Cava Canim eight or ten miles ſhort of that bay.

Kanè is repreſented as a port of conſiderable trade, ſubject to Elcázus, king of the Incenſe country, who reſided at Sabbatha, the principal city of the diſtrict, which lies at ſome diſtance inland. At Kanè is collected all the incenſe that is produced in the country, and which is conveyed hither both by land and ſea, either by means

[175] I have not been without ſuſpicion, that Kanè might be Keſchin, which I have found written Caſſin; that is, Kâſn in Oriental pronunciation. But I have the name only to guide me to this ſuſpicion; for Keſchin would not agree with the diſtance from Aden, or to C. Fartaque, or with the Bay Sachalitès of the Periplûs. Neither have I yet found, in any map or narrative, two iſlands off Keſchin, to correſpond with Orneôn and Troolla. Iſlands, rivers, mountains, and promontories, are our ſureſt guides.

[176] Orneôn is Bird Iſland, ſo called perhaps from the univerſal habit of ſea fowls reſorting to deſert iſlets; and Troolla has no meaning in Greek. It is ſaid to lie 120 ſtadia from Kanè, of which I can find no trace.

[177] Sixty leagues, or 180 geographical miles, are equal to 208 miles Engliſh. See Oriental Navigator, p. 162.

of

of caravans, or in the veſſels of the country, which are floats ſupported upon inflated ſkins[177]. Sabbatha is ſuppoſed by moſt of the commentators to be Schibam or Scebam, which Al Edriſſi places in Hadramaut, at four ſtations, or an hundred miles, from Mareb: a certain proof that we have adopted the right Sahar for the Periplûs; becauſe Mareb cannot be within *three* hundred miles of the Eaſtern Sahar, or Seger; and Seger is not conſidered by Al Edriſſi as a part[178] of Hadramaut, but as a ſeparate diſtrict.

It is remarkable that the author of the Periplûs, who notices Sabêa and Oman by name, makes no mention of Hadramaut, the third general diviſion of the coaſt, but diſtinguiſhes it only by the title of the Incenſe country. To maintain that theſe are the three general diviſions of Arabia on the Indian Ocean, is conſonant to all the evidence we have, ancient and modern; neither do independent diſtricts or ſheiks, as thoſe of Keſchin, Seger, or Mahra, interfere with this diſtribution. And that we are equally correct in aſſigning the Weſtern Sahar to Hadramaut, is capable of proof; for Al Edriſſi ſays, from Aden to Hadramaut, which lies to the eaſt of Aden, are five[180] ſtations. If therefore we obſerve, that at Kanè we are already two hundred miles eaſt of Aden, we are advanced far enough to ſhew that we are in Hadramaut[181], and that the Weſtern Sahar is properly placed in that province.

[177] Theſe floats are noticed by Agatharchides, and are by ſome ſuppoſed to give name to a tract inhabited by Aſcitæ, from Ασκὸς, Uter.

[178] Terræ Hadramaut contermina eſt ab oriente terra Seger. P. 53.

[180] Ab Aden autem ad Hadramaut quæ jacet ab orientali latere ipſius Aden, ſtationes quinque. P. 26.

[181] Ptolemy makes Kanè the emporium of Hadramaut.

At Kanè likewiſe, as there was an eſtabliſhed intercourſe with the countries eaſtward [182]; that is, with Barugaza, Scindi, Oman, and Perſis [183]; ſo was there a conſiderable importation from Egypt, conſiſting of the following articles:

Πυρὸς ὀλίγος, - - -	A ſmall quantity of Wheat.
Οἶνος, - - - -	Wine.
Ἱματισμὸς [184] Αραβικὸς, - -	Cloths for the Arabian market.
κοινὸς, - - -	Common ſort.
ἁπλᾶς, - -	Plain.
νόθος περισσότερος, -	Mixed or adulterated, in great quantities.
Χαλκὸς, - - - -	Braſs.
Κασσίτερος, - - -	Tin.
Κοράλιον, - - - -	Coral.
Στύραξ, - - - -	Storax, a reſin.

And many other articles, the ſame as are uſually imported at Mooza. Beſides theſe alſo, there are brought

Ἀργυρώματα τετορευμένα, -	Plate wrought, and
Χρήματα τῷ βασιλεῖ, - -	Specie for the king.
Ἵπποι, - - - -	Horſes.
Ἀνδριάντες, - - -	Carved Images.
Ἱματισμὸς διαφόρος [185] ἁπλᾶς, -	Plain Cloth, of a ſuperior quality.

[182] Τῶν πέραν ἐμπορίων, I had ſuppoſed to mean the marts only on the coaſt of Africa *beyond* the ſtraits; but, from the uſage here, the expreſſion is evidently extended to all ports beyond the ſtraits, not only in Africa, but in India and the Gulph of Perſia.

[183] Τῆς παραλιμένης Περσίδος, is the coaſt of Perſia oppoſite to Oman.

[184] Not cloth of Arabia, but for the Arabian market: ſo we ſay in the mercantile language of our own country, Caſſimeer cloth; that is, cloth for the market of Caſſimeer. And the word ἱματισμὸς ſeems to imply, that the cloth was made up into garments.

[185] Apparently in oppoſition to Κοινὸς.

The

The exports are the native produce of the country:

Λίβανος, - - - - Frankincenſe.
Ἀλόη, - - - - Aloes.

and various commodities, the ſame as are found in the other markets of the coaſt. The beſt ſeaſon for the voyage is in Thoth, or September *.

After leaving Kanè, the land trends inward, and there is a very deep bay called Sachalítes, that is, the Bay of Sachal or Sachar, and of a very great extent. The promontory (which is at the termination) of this is called Syágros, which fronts towards the eaſt, and is the largeſt promontory in the world. Here there is a garriſon for the protection of the place, and the harbour is the repoſitory of all the Incenſe that is collected in the country.

XIV. BAY SACHALÍTES, HADRAMAUT.

THIS bay of Sachal has already been aſſerted to be Sahar; and this Sahar, or "Shahar[186], appears to be a fine town at the pre-" ſent day, ſituated by the ſea-ſide; and it may be ſeen five or ſix " leagues off. The point of Shahar is twelve or thirteen leagues " from Maculla Bay;" while the coaſt, with various curves, but no indenture ſo great as the Periplûs requires, ſtretches E.N.E. to Cape Fartaque[187]; and that this Fartaque is Syágros, is the point now to be proved.

[186] Oriental Navigator, p. 162.

[187] Written Fartak, Fartaſh, Fortuaſh.

* *I requeſt the Reader to correct an error on this ſubject*, p. 288. ſupra, *where it was ſaid, that the ſeaſon was the latter part of Auguſt, and connected with the voyage to Muzíris. I now find, that the voyage to the ſouthern coaſt of Arabia was a diſtinct navigation. They might make it earlier; but they ſailed later in the ſeaſon, that they might have leſs time to wait for the eaſterly monſoon in November*

And firſt, that it points to the eaſt is true; but it is not true that it is the largeſt promontory in the world; for Ras-el-had, on the ſame coaſt, is larger. But it is more conſpicuous, and was of more importance, probably, in the author's view, as forming the great entrance to the Gulph of Arabia, in conjunction with Cape Arômata on the coaſt of Africa; and as ſuch, it is ſtill a point of moſt material conſequence in the opinion of modern navigators, as well as in that of the ancients.

A ſecond proof is, that Socotra is ſaid to lie between this cape and Arômata; which, in one reſpect, is true, and cannot be applied to Ras-el-had. And a third is, that the iſlands of Curia Muria, and Mazeira, are to the eaſt of this cape, as they really lie; while, if Syágros were fixed at Ras-el-had, the iſlands muſt lie on the weſt of the Cape, directly tranſpoſed from their real poſition to an erroneous one. But of this we ſhall treat in its place. We muſt now return to Sahar, which is conſidered in the Periplûs as the heart of the Incenſe country, and the Incenſe country is Hadramaut.

Hadramaut is the Hatzar-maveth of Geneſis, which ſignifies [184] in Hebrew, the Court of Death; and in Arabick, the Region of Death; both names perfectly appropriate, according to the teſtimony of the Periplûs, which informs us, "that the incenſe is collected by "the king's ſlaves, or by malefactors condemned to this ſervice as "a puniſhment. The country is unhealthy in the extreme; peſti-"lential even to thoſe who ſail along the coaſt, and mortal to the "wretched ſufferers employed in collecting the frankincenſe; who "periſh likewiſe as often by want [and neglect] as by the perni-"cious influence of the climate. The country inland is moun-"tainous, and difficult of acceſs; the air foggy, and loaded with

[184] Bochart Phaleg. p. 101.

"vapours

" vapours cauſed [as it is ſuppoſed] by the noxious exhalations " from the trees that bear the incenſe; the tree itſelf is ſmall and " low, from the bark of which the incenſe [189] exudes, as gum does " from ſeveral of *our* [190] trees in Egypt."

The conveyance of this drug by land, Pliny informs us, was through Thomna, the capital of the Gebanites, to Gaza on the coaſt of Paleſtine, by a caravan that was ſixty-two days in its progreſs; and that the length of this journey, with the duties, frauds, and impoſitions on it, brought every camel's load to upwards of two-and-twenty pounds, Engliſh; and a pound of the beſt ſort at Rome, to more than ten ſhillings. The courſe of this conveyance is not eaſy to comprehend [191]; for if the commodity paſſed by a caravan, the Minêans were centrical, and the uſual carriers from Gerrha on the Gulph of Perſia, from Hadramaut alſo, and from Sabêa, to Petra in Idumêa. But we muſt not underſtand this as excluding the conveyance of the incenſe to Alexandria by the Red Sea; for that city was the great repoſitory of this, as well as

[189] It has been obſerved already from Niebuhr, that the beſt incenſe is now procured from India, by far more clear, white, and pure, than the Arabian; and it is a circumſtance well worth inquiry, whether the collection of this gum is attended with the ſame fatal effects in that country as are here deſcribed; and whether the conſequences are deducible from the drug itſelf, or from the nature of the country. Thoſe who are deſirous of learning more than is here remarked on this ſubject, may conſult Pliny, lib. 12. c. 14. and Salmaſius, 485, et ſeq.

[190] Ὡς τινες καὶ τῶν παρ' ἡμῖν ἐν Αἰγύπτῳ δένδρων. This is an expreſſion ſo clearly marking the country of the writer, that it cannot be miſtaken; and the whole deſcription is not that of a man who merely wrote upon the ſubject, but of one who had viſited the country, and painted what he ſaw.

[191] Bochart places Thomna between Sabbatha and Marſaba, and ſuppoſes the Katabéni and Gebanitæ to be the ſame people; which they are; for Pliny makes Ocila (Okêlis) a port of the Gebanites, xii. 13.: but if ſo, it is the territory of Maphartis he muſt place them in; and they would not move by caravans, but by ſea. Strabo, however, makes Tamna the capital of the Katabéni, p. 768.; and his Katabéni are not between Sabbatha and Marſaba, but in the territory of Maphartis.

all the other produce of India and Arabia. Pliny [192] mentions this particularly, and notices the precautions taken by the merchants of that city to prevent fraud and adulteration.

The Periplûs does not advert to any particular ſpot in this bay, or ſpecify any town of Sachal; but, after relating the circumſtances as they are here ſtated, proceeds directly to Syágros. Syágros, or the Wild Boar, would naturally induce a perſuaſion that it was a nautical appellation, like the Ram Head [193], Dun Noſe, &c.; but it is far more probably to be, like Phenícon in the Red Sea, derived from the palm-trees obſerved there, of a particular ſpecies, called Syágros: they are of a ſuperior ſort [194], as Pliny informs us, with large fruit, hard, and rough in appearance, and with a high reliſh of the flavour of *wild boar*. What this flavour is, we may leave to the naturaliſts to determine; but the alluſion to Syágros is manifeſt; and that the Cape takes its name from its produce, is a natural concluſion. That this promontory is actually Cape Fartaque, cannot be doubted, if we now advert to the particulars connected with it; for we are told, that the iſland of Dioſkórida lies between this point and Cape Arômata, or Gardefan, on the coaſt of Africa; that it is at a conſiderable diſtance in the open ſea, but nearer to Syágros than to the Cape oppoſite; and that it is a large iſland, far exceeding all the others that appertain to the coaſt of Arabia.

Now although this account is not ſtrictly accurate, for Socotra is not actually between the two capes, but forms a terminating point

[192] Lib. xii. 14.

[193] So Κριὸς μετώπων in Crete.

[194] De Palmis. In meridiano orbe præcipuam obtinent nobilitatem Syagri . . . . . ipſum pomum grande, durum, horridum, a cæteris generibus diſtans ſapore ferino, quem ferme in *apris* novimus. Plin. xiii. 4.

It is not the coco nut palm; for, among his forty-nine ſpecies, Pliny afterwards mentions the Cycas (Κυκας) pomo rotundo, majore quam mali amplitudine.

to

to Cape Gardefan, like our Scilly Iſlands to the Land's End, and is conſequently nearer Africa than Arabia; ſtill, ſpeaking generally, the deſcription in other reſpects is ſufficiently correct. The moſt tranſient reference to the map will at leaſt prove, that none of theſe circumſtances can be applied to Ras-el-had; for that cape lies almoſt ſeven hundred miles farther to the north-eaſt, and can hardly be ſaid, in any ſenſe, to be *oppoſite* to Gardefan, but by drawing a line of ſuch extreme obliquity, as would never occur to the mind of a mariner under the idea of an *oppoſite* promontory.

XV. DIOSCÓRIDA, OR SOCOTRA.

Dioscorida, Dioſcorides, Dioſcûrias, or Dióſcora, may have a Greek origin, but it has ſo near a reſemblance to Socotra or Zocotora, that it is much more likely to be a nautical corruption of an Arabick term, than the application of a Greek one.

This iſland is near an hundred miles long, and thirty at its greateſt breadth: it was inhabited only on the northern [195] ſide in our author's age, and the population there was very ſcanty, conſiſting of a mixture of Arabians, Indians, and Greeks, who had reſorted hither for

[195] In the French Voyage publiſhed by La Roque, 1716, Paris—Tamarin, the capital of the iſland, was ſtill on the north ſide. He mentions alſo, that it was ſubject to the ſheik of Fartaque, the ſame probably as the ſheik of Keſin; though he calls Fartaque the capital, and Seger, or Schœhr, the port (p. 151). The French obtained here aloes, at eight piaſtres the quintal of 95 pounds; beſides frankincenſe, civet, and gum dragon. Tamarin was a well-built town. There are two voyages contained in this work; and in the ſecond, a party went up from Mokha to Sana, who ſpeak well of the Arabs, and the Imam's government. It is a curious work, well digeſted and put together; and the more worthy of conſideration, as I know of no other Europeans who have been at Sana, except Barthema and Niebuhr.

the

the purpoſes of commerce; while the remainder of the country was marſhy and deſerted. Marco Polo informs us, that in his time the inhabitants were Chriſtians; and Al Edriſſi confirms this, with the addition, that the Greeks were introduced there by Alexander [196], at the requeſt of Ariſtotle [197], in hopes of obtaining aloes, the principal produce of the iſland, and of the beſt quality that is known. Now it is remarkable, that aloes is not mentioned by the author of the Periplûs; but he notices particularly the drug called Indian [198] cinnabar, which exudes from a certain ſpecies of trees, and tortoiſe-ſhell, of the largeſt ſize and beſt ſort; adding, that there is likewiſe the mountain or land-tortoiſe, which has the lower ſhell of a ruddy yellow, and too hard to be cut; and that from the ſolid part of this were formed caſes [199], boxes, and writing-tablets [of great value].

[196] When he was returning, ſays Al Edriſſi, from the Perſian Gulph to the Gulph of Arabia: which, unfortunately, he never did; and equally unfortunate is he in the reaſon he aſſigns for the inhabitants being Chriſtians, becauſe Alexander planted Greeks there.

Coſmas Indicopleuſtes ſays, they were Greeks from Egypt; he was not at the iſland, but converſed with ſome of the natives in Ethiopia: they were Chriſtians, and their prieſts were from Perſia, that is, they were Neſtorians. Bayer Hiſt. Bact. p. 111. in Montfaucon's Edit. of Coſmas, p. 179.

Marco Polo ſays, in Moſul on the Tigris, hanno un patriarcha che chiamano Jacolit (catholicos) il qual ordina Arci Veſcovi, Veſcovi, & Abbati, mandandoli per tutti le partie dell India & Al Cairo, et in Baldach (Bagdat), & per tutte le bande dove habitano Chriſtiani ..... non pero ſecondo che commanda la chieſa perche falla in molte coſe, et ſono Neſtorini, Jacopiti et Armeni. Lib. i. c. 6.

[197] Dapper mentions aloes, ambergris, and gum dragon, &c. from a tree called Ber; and notices the Arabs from Caxem (Keſchin), and Fartaque as ruling. They are not now Chriſtians, he ſays; but have chriſtian names, as the remains of that religion.

[198] The native cinnabar is a mineral; and what is meant by Indian cinnabar that diſtils from trees, is not eaſy to determine. But I find in Chambers's Dictionary, that there has been a ſtrange confuſion between cinnabar and dragon's blood; the dragon's blood therefore is meant, which is one of the natural productions of the iſland.

[199] Al Edriſſi, ſpeaking of the tortoiſe-ſhell at Curia Muria, ſays, dorſa teſtudinum ex quibus conficiunt ſibi incolæ Iaman paropſides ad lavandum & pinſendum. P. 24.

He

He informs us alſo, that there were ſeveral rivers [200], and abundance of crocodiles, ſnakes, and large lizards; from the laſt of which they expreſſed the fat, which they uſed for oil, and the fleſh for food: but they had neither corn nor vines. Some few merchants from Mooza viſited this iſland; and ſome that frequented the coaſts of India and Cambay touched here occaſionally, who imported rice, corn, India cottons, and women [201] ſlaves, for which they received in exchange very large quantities of the native tortoiſe-ſhell.

In the author's age, this iſland was ſubject to Eleázus, the king of Sabbatha, who ſet the revenue to farm [202], but maintained a garriſon for the purpoſe of ſecuring his receipts and ſupporting his authority. This fact is ſimilar to what we had occaſion to notice on the coaſt of Africa, where ſeveral of the ports in Azania (or Ajan) were ſubject to Charibáel and Cholêbus, whoſe territories were in Yemen; and Niebuhr informs us, that Socotra is at this day ſubject to the ſheik of Keſchin, who has conſiderable poſſeſſions in Hadramaut; and Keſchin, which lies a few leagues to the weſtward of Fartaque, cannot be very diſtant from the territory of Eleázus.

The conſiſtency of theſe circumſtances in the ancient and modern accounts, may induce a perſuaſion that we have traced out our way ſo far with certainty and preciſion; the next ſtep we are to advance, is the only one on the whole coaſt which will raiſe a

[200] The water here is very good; it runs from the mountains into a ſandy valley among date trees. The natives are civil to ſtrangers, but very poor; and the only commodity to trade with, is rice [an article in the Periplûs], for which we had in exchange ſome cows, goats, fiſh, dates, good aloes, and gum dragon. The prince, or viceroy, reſides at Tamarida, on the *north* ſide of the iſland. Capt. Blake, Oriental Navigator, p. 149.

[201] Σώματα θηλυκὰ διὰ σπάνιν ἐκεῖ προχωρῆντα; carried there, becauſe they had few women for the haram.

[202] Ἡ νῆσος ἐκμισθωτεῖται.

doubt, and which has certainly been the ſource of the conſtant opinion embraced by modern [203] geographers, that Syágros is not Fartaque, but Ras-el-had.

XVI. MOSKHA AND ÓMANA.

I SHALL ſtate this circumſtance in the very words of the author; for he ſays, "Adjoining to Syágros there is a bay which runs [204] "deep into the main land [of] O'mana, ſix hundred ſtadia in width; "after this there are high mountainous rocks, ſteep to, and inha- "bited by a [wild] race, that live in caverns and hollows of the "cliff. This appearance of the coaſt continues for five hundred "ſtadia more, at the termination of which lies a harbour called "Moſkha, much frequented [205] on account of the Sachalitick incenſe "which is imported there."

It [206] is the mention of Moſkha and O'mana here that neceſſarily ſuggeſts the idea of Maſkat, which is in Oman, and the principal port of trade in the province: the deſcription of the mountainous coaſt is characteriſtic; and the diſtance, ſuppoſing Ras-el-had to be Syágros, not incongruous. I cannot account for this coincidence; but I do not think that Moſkha is Maſkat, becauſe Maſkat is beyond C. Ras-el-had; and I ſhall ſhew immediately, by the iſlands which ſucceed Moſkha, that we are not yet arrived at Ras-el-had by four hundred miles. Neither will the Moſkha of Ptolemy ſolve the diffi-

[203] Bochart ſuppoſes Syágros to lie between Hadramaut and Sachalites; which is true in regard to the Sachalites of Ptolemy, and then it is Fartaque. Phaleg. 106.

[204] Ἐπὶ βάθος ἰδύνων εἰς τὴν ἤπειρον, Ὀμανα.

[205] Ὅρμος ἀποδεδειγμένος, the appointed, the regular port.

[206] Conſult d'Anville's Memoire ſur le Mer Erythrée, Academie de Belles Lettres, tom. xxxv. p. 598.

culty;

culty; for he carries it farther back than the Periplûs, and has placed it to the weſtward of Syágros, which is *his* Fartaque likewiſe, as well as the Fartaque of our author.

The mention of O'mana here is ſtill more unaccountable; but I was in hopes to have reconciled it by means of a river O'rmanus, or Hórmanus, which Ptolemy has in his Bay Sachalítes, and which he brings down from a place called O'mana. This, however, is not to be depended upon; for his map is ſo diſtorted on this part of the coaſt, that it leaves the whole matter in uncertainty. One circumſtance only can be deduced from it; which is, that his Ormanus and O'mana are both to the weſtward of Ras-el-had, as well as the O'mana and Moſkha of the Periplûs: the proof of which is, that they both precede his Koródamon, and Koródamon muſt be the repreſentative of Ras-el-had, as it is his extreme point eaſt of the whole peninſula.

There are no data for placing the Moſkha of the Periplûs, but the diſtance of eleven hundred ſtadia from Syágros; and this meaſure brings it nearer to Seger, the Sachalítes of Ptolemy, the Schoehr of the moderns, than any other place it can be referred to. At Moſkha, the mention of the Bay Sachalítes is again introduced by the Periplûs; for the author informs us, that throughout the whole extent of that bay, in every port, the incenſe lies in piles without a guard [107] to protect it, as if it were indebted to ſome divine power for its ſecurity. Neither is it poſſible to obtain a cargo, either pub-

[107] There is nothing very extraordinary in this: plenty of a commodity, however valuable, and familiarity with the ſight of it, take off from the edge of depredation. Bars of ſilver lie apparently without a guard in the ſtreets of Panama; but in Seger, beſides the protection of the gods, the ſheik ſeems to keep good watch, if a ſingle grain cannot be got off till the duty is paid.

licly or by connivance, without permiſſion of the king. Nay, if a ſingle grain were embarked clandeſtinely, good fortune indeed muſt the merchant have who could eſcape with his veſſel from the harbour.

At Moſkha there is a regular intercourſe by ſea with Kanè; and ſuch veſſels as come from Limúrikè [208] and Barugaza, too late in the ſeaſon, and are obliged to paſs the adverſe monſoon in this port, treat with the king's officers to obtain frankincenſe in exchange for their muſlins, corn, and oil [209].

If it ſhould now be aſked, whether I am myſelf ſatisfied with the account here given of O'mana and Moſkha, I could not anſwer in the affirmative. Theſe two names certainly throw a ſhade of obſcurity and difficulty over the arrangement of the coaſt; and if this barren ſubject ſhould be reviewed by a future commentator, much pleaſure would it be to ſee thoſe obſtacles removed, which I have not been ſo fortunate as to ſurmount.

Still that, upon the whole, the aſſumption of Eartaque for Syágros is right, depends upon proofs now to be produced, which are incontrovertible; for we are now advancing to two groupes of iſlands, which are the moſt conſpicuous of any that are attached to the coaſt of Arabia on the ocean; and as iſlands, rivers, and mountains, are features indelible, in theſe we cannot be miſtaken.

XVII. ISLANDS OF ZENÓBIUS, OR CURIA MURIA.

At fifteen hundred ſtadia diſtance from Moſkha, which I have ſuppoſed to be Seger; and at the termination of the diſtrict called

[208] Concan and Cambay.

[209] Probably ghee, or liquid butter.

Aſikho, there are ſeven iſlands, almoſt in a line, called the Iſlands of Zenóbius. Now the diſtance anſwers to make theſe the iſlands in the Bay of Curia Muria, the Chartan [210] Martan of Al Edriſſi; and though he ſays they are only four, and four only they appear on our charts, it is concluſive in their favour, that he ſtyles the bay Giun-al-Haſciſc [211]; and Haſek (the Aſikho of the Periplûs) is the principal town in the bay at the preſent hour. Haſec [212] Al Edriſſi calls it himſelf in another place, where he mentions only two iſlands, as Chartan and Martan; and ſays, it is a ſmall city, but populous, and the bay deep and dangerous. The four iſlands have now obtained the names of Halki, Sordi, Halabi, and Deriabi; and it is poſſible that ſome rocky or deſerted iſlets attached to them may have cauſed them to have been reckoned ſeven; for ſeven they are in Ptolemy alſo, placed in the ſame relative ſituation between Fartaque and Ras-el-had, though not correct in their vicinity to the coaſt.

XVIII. SARÁPIS, OR MAZEIRA.

FROM Haſec, or Aſikho, we have, firſt, a tract inhabited by a barbarous tribe [213], not ſubject to Arabia but Perſis [214]; and at the diſtance

[210] Bochart ſays, that by a change of the points, he reads Curian Murian for the Chartan Martan of Al Edriſſi.

[211] Sinus Herbarum, Al Edriſſi, p. 22.—P. 27. he makes Haſec the city, and Al Haſciſc the bay; but are they not the ſame name?

[212] Here Ptolemy places the Aſcitæ, whoſe name he derives from ἀσκὸς, becauſe they ſail on floats ſupported on inflated ſkins; but this is giving a Greek derivation of an Arabick name. Bochart conjectures, with much more probability, that they are the inhabitants of Haſek; and that Ptolemy's Mæphat is a corruption of Merbat, as it is written in Al Edriſſi, the C. Morebat of our charts. Phaleg. 106.

[213] Ἡν ἀφ' ὕψης παραπλέοντι ὡς ἐπὶ πεντακοσίους διακοσίους ἀπὸ τῶν Ζηνοβίου; rendered by Hudſon, Hanc ubi ex ſuperuis locis prætervectus fueris: but ἀφ' ὕψης means keeping off ſhore by a direct courſe, in oppoſition to περιπολπίζοντι, or following the bend of the coaſt.

[214] This is no more extraordinary than that the ſovereigns of Arabia ſhould have territories

diſtance of two thouſand ſtadia from the Iſlands of Zenóbius, another iſland called Sarápis. Sarápis, it is added, is an hundred and twenty ſtadia from the coaſt, two hundred ſtadia in breadth, and contains three villages, inhabited by prieſts, or recluſes, of the Ichthyóphagi; who ſpeak the Arabick language, and wear girdles or aprons made of the fibres of the cocoa [215]. Plenty of tortoiſe-ſhell, and of a good quality, is found here, on which account it is regularly frequented by the ſmall veſſels and barks from Kanè.

If we ſhould now conſult the chart, and examine the ſize of this iſland, and its diſtance from the iſles of Zenóbius, which we may eſtimate by the ſtadia at about two hundred miles, we identify it to a certainty with Mazeira; for there is no other iſland of this ſize, or at an hundred and twenty ſtadia from the coaſt, or perhaps capable of containing three villages, any where to the weſtward of Fartaque, or the eaſtward of Ras-el-had. It muſt therefore lie between theſe two points, and preciſely aſcertain, that we are paſt the one, and not yet arrived at the other; and likewiſe, that the iſles of Zenóbius muſt, by their diſtance and relative ſituation, be the Curia Muria of the preſent day, notwithſtanding their diſagreement in point of number.

Mazeira is well known to modern navigators: its ſize and ſituation are ſufficiently aſcertained, and there is a channel [216] between the iſland and the main, through which Engliſh ſhips have paſſed.

tories on the coaſt of Africa. In Niebuhr's time, the ſheik of Abu Schahr, or Buſheer, in Perſis, was maſter of Bahrain on the weſtern coaſt of the Gulph of Perſia.

[215] Περιζώματος φύλλων ΚΟΪΚΙΝΩΝ. We find the name of the Cocoa Palm-tree (as far as I can learn) firſt mentioned in this work. Pliny had obtained it likewiſe. Cloth is ſtill made of the fibres of the nut: whether the leaves afford a ſubſtance for weaving, or whether they were themſelves the apron, may be doubted; the text is in favour of the leaves.

[216] Oriental Navigator, pp. 167, 168.

D'Anville

D'Anville has ſuppoſed that Sarápis is the ſame as Mazeira, without conſidering that if it be ſo, it is to the weſt of Ras-el-had, and that therefore his Syágros, which is fixed at Ras-el-had, cannot be correct.

XIX. ISLANDS OF KALAIUS, OR SUADI.

UPON leaving Sarápis, we have another diſtance of two thouſand ſtadia, and then another group, called the Iſlands of Kalaius. The diſtance is too ſhort [217], but the iſlands are thoſe of Suadi or Swardy, which lie between Maſkat and Sohar, and which, according to M'Cluer [218], are formed into four ranges for the ſpace of ſeven leagues, with a clear paſſage between them. In aſſuming theſe iſlands for thoſe of Kalaius, there can be no error, for the language of our author is preciſe: he ſays, that as you are now approaching the Gulph of Perſia, keeping cloſe [219] round the coaſt, you change the

But how iſlands that lie two hundred miles from the coaſt, can be ſaid to lie in a bay of the continent, is not eaſy to comprehend. I propoſe διαπλεόμεναι, or παραπλεόμεναι, *paſſed* or *ſailed through*, for πλεόμεναι, and to render the paſſage thus:

[Proceeding on your courſe from Sarápis] you wind round with the adjoining coaſt to the north; and as you approach towards the entrance of the Gulph of Perſia, at the diſtance of two thouſand ſtadia [from Sarápis] you paſs a group of iſlands, which lie in a range along the coaſt, and are called the Iſlands of Kalaius.

I imagine that παρισχμέναι τῇ χώρᾳ cannot be rendered better than by deſcribing the iſlands

[217] I ſhould read τρισχιλίως for διτχιλίως; but though I have ſuggeſted corrections, I have never ventured on an alteration of the text.

[218] Oriental Navigator, p. 181. & 175.

[219] Περιχολπίζοντι δὲ τὴν ἐχομένην ἤπειρον, ἐις αὐτὴν τὴν ΑΡΚΤΟΝ ἤδη περὶ τὴν ἐισβολὴν τῆς Περσικῆς θαλάσσης, κεῖνται νῆσοι πλεόμεναι, [πλείονες, Stuckius.] Καλάϊω λεγόμεναι νῆσοι, σχεδὸν επὶ ταδίως διοχιλίως παρισαμέναι τῇ χώρᾳ.

Thus rendered by Hudſon:

In ſinu autem vicinæ continentis, ad ſeptentriones, prope oſtium maris Perſici inſulæ jacent, ad quas navigatur, Calæi inſulæ dictæ, quæ fere bis mille ſtadiorum intervallo a continente ſunt disjunctæ.

the direction of your courſe to the NORTH. This is literally true at Ras-el-had, and no where elſe on the coaſt; for Ras-el-had is the extreme point eaſt of all Arabia; and as ſoon as you are paſt it, the coaſt falls back again to the north-weſt. If we could reckon the two thouſand ſtadia from the point where this alteration of the courſe takes place, that is, from Ras-el-had, the diſtance alſo would correſpond.

After arriving at theſe iſlands, if we ſhould review the whole courſe from Fartaque to Ras-el-had, there is nothing to interfere with the general ſtatement, except the mention of Ὀmana and Moſkha; and no ſingle point ought to ſtand in competition with the whole. At the diſtance of eighteen hundred years, it is difficult to ſay whether the obſcurity lies with us, or the author; one ſhould rather acquit the author, who is ſo correct in other reſpects, and look for a ſolution from ſome future lights, which may appear, either from a better knowledge of the coaſt, or from ſome better readings of the commentators, conſidering that the copy which we have is certainly defective, and that no manuſcripts are to be expected.

iſlands as "*lying in a range.*" Perhaps it ſhould be read παρατεταμίναι; and this is the preciſe diſtinction of M'Cluer. ἤδη may be read either with εἰς αὐτὴν τὴν Ἄρκτον, or with περὶ τὴν εισϐολὴν, "*as you are juſt approaching the Gulph of Perſia lie iſlands;*" and I place a comma at διοχιλίας, in order to make it expreſs the diſtance from Sarápis: but if it be joined with the final clauſe, it muſt be rendered, "*the Iſlands of Kalaius, which lie in a range*" "*two thouſand ſtadia along the coaſt.*" This is not true; neither can we ſtretch the ſeven leagues of M'Cluer, or one-and-twenty miles to two hundred. Περιχολπίζοντι, ſignifies literally, to *keep cloſe to the ſhore*, to *follow the windings of the ſhore*. But whatever doubt there may be concerning the contents of the whole paſſage, nothing can be more plain than this one circumſtance, that the courſe of the voyage is changed here to the NORTH, and this particular can be true only at Ras-el-had. This is the truth we have been ſearching for, and I think the proof is concluſive.

The

The natives, on the main oppoſite to theſe iſlands, are ſaid to be treacherous, and their viſion to be defective during the light of the day: what the latter circumſtance may allude to, it is not material to inquire, but their treachery is natural if they are Bedouin Arabs, as Lieut. Porter [220] ſays they were in his time at Sohar, and not civilized in their behaviour to the people of his boat.

XX. ISLANDS OF PAPIAS.

We have now the Iſlands of Papias, and the Fair Mountain, with the entrance of the Perſian Gulph: for the firſt, we muſt look to two or three ſmall iſlands on the coaſt, beyond Sohar, towards the north; and at the laſt of theſe the Journal places the Fair Mountain, which would anſwer ſufficiently to Cape Fillam, if that be high land; and not far from Fillam are the Straits.

It is not improbable, however, that the Iſlands of Papias may be the Coins, which lie immediately off the entrance of the gulph; for, in a letter of Lieut. M'Cluer to Mr. Dalrymple, he writes, "the Great Coin ..... lies in lat. 26° 30′ 0″ north .... and there "are four other iſlands between this and Cape Muſſeldom, all of "them ſmaller than the Great Coin, and none of them inhabited ... "Beſides theſe, there are ſeven others cloſe in, which are not eaſily "diſtinguiſhed from the Arabian ſhore." But the determination of the queſtion will depend upon the poſition in which we view the iſlands; for they ſeem to lie within Moçandon, while thoſe of Papias precede it. We muſt likewiſe find a place for the Fair Mountain between them and the Cape, for which there ſeems hardly ſpace ſufficient.

[220] Oriental Navigator, p. 177.

XXI. SABO, ASABO, OR MOÇANDON.

It is well known that Moçandon is repreſented in Ptolemy by the black mountains called Aſabo, the promontory of the Aſabi; and that Sabo ſignifies South, deſignating, as it ſhould ſeem, in the mind of Arabian navigators, the extreme point ſouth of the Gulph of Perſia. A tribe is alſo noticed in the neighbourhood, which is called Macæ both by Ptolemy and Arrian; and in Macæ we obtain probably the rudiments of Moçandon which *we* have from the Portugueſe. But the Orientaliſts give a different etymology, and inform us, that Mo-ſalem is the Cape of Congratulation.

Moçandon is of vaſt height, and frightful appearance; it forms, with Mount [221] Ehowrs, or Elbours, on the oppoſite ſhore, the entrance to the gulph, which is near forty miles broad, eſtimated at ſixty in the Periplûs; and Elbours is called the Round Mountain of Semiramis: it is round in fact, and has its modern name of Elbours from its ſuppoſed reſemblance to the Fire Towers of the Guebres or Parſees.

Moçandon is a ſort of Lizard point to the gulph; for all the Arabian ſhips take their departure from it, with ſome ceremonies of ſuperſtition, imploring a bleſſing on their voyage, and ſetting afloat a toy, like a veſſel rigged and decorated, which, if it is daſhed to pieces by the rocks, is to be accepted by the Ocean as an offering for the eſcape of the veſſel.

Whether the author himſelf paſſed this cape, and entered the gulph, is very dubious; from the manner of the narration, I ſhould conclude he never entered the gulph; for he mentions only two particulars within the ſtraits, and then introduces the paſſage acroſs the open ſea from Arabia to Karmania.

[221] Theſe two mountains oppoſite, are the Owair and Koſair of Al Edriſſi, p. 4.

XXII. TERÊDON, APÓLOGUS, or OBOLEH.

But the two particulars noticed are remarkable: the one is the Pearl Fiſhery, which extends on the bank great part of the way from Moçandon to Bahrain; and the other is the ſituation of a town called Apólogus, at the head of the gulph on the Euphrates, and oppoſite the Fort of Paſinus or Spaſinus. There can be no heſitation in adopting the opinion of d'Anville, that Apólogus is Oboleh, upon the canal that leads from the Euphrates to Baſra; for Oboleh is ſituated, according to Al Edriſſi [222], at the angle between the canal and the river; and he adds, that the canal covers it on the north, and the river on the eaſt; conſequently, this is as nearly oppoſite to the Fort of Paſinus, as the canal is to the Haffar River, which communicates with all the mouths of the Tigris and Euphrates.

Apólogus is Greek in its external form, but much more properly deduced, as d'Anville obſerves, from Oboleh, which, with the ſtrong oriental aſpirate, becomes Obolehh or Obolegh. We may conſequently aſſume this for a proof of its exiſtence as a place of commerce at ſo early a period, when it had probably taken place of Terédon or Diridótis, as Baſra took place of Oboleh under the ſecond Caliphate [223] of the Mahometans; but that Oboleh continued a mart of conſideration long after the building of Baſra [224], we may

[222] P. 121.

[223] Abilfeda Reiſke, p. 113.

[224] Al Edriſſi mentions Baſra ſufficiently; but in his general deſcription he ſays, Ab mari Sin derivatur mare Viride, eſtq; ſinus Perſiæ et Obollæ, ... ſinus pervenit uſque ad Obollam prope Abadan, ibiq; terminatur; pp. 3, 4.

Mare Viride, - - the Perſian Sea.
Mare Fulvum, - the Caſpian.
Mare Candidum, - the Propontis.
Mare Nigrum, - the Euxine.
Mare Venetum - the Blue Sea, or Mediterranean.

Why do we diſpute ſo much about the mare Rubrum?

be aſſured by Al Edriſſi's making it the termination of the gulph, as well as the Periplûs; and Oboleh, or a village that repreſents it, ſtill exiſts between Baſra and the Euphrates; the canal alſo is called the Canal of Oboleh.

Terêdon had been a city of great trade from very remote times; that is, from the age of Nebuchadnezzar to the Macedonian conqueſt. It ſeems to have continued ſo till the time of Auguſtus, for it is mentioned by Dionyſius [225]; deſerted afterwards, perhaps, from the failure of water in the Khore Abdillah, or ancient mouth of the Euphrates, and replaced by Oboleh, probably during the dynaſty of the Arſacides. The Babylonians, who commanded the river from the gulph to the capital, doubtleſs made uſe of it as the channel of Oriental commerce; and the traffick which had paſſed by Arabia, or by the Red Sea, through Idumêa, to Egypt, Tyre, and other places on the Mediterranean, was diverted by Nebuchadnezzar, after the deſtruction of Tyre, to the Perſian Gulph; and through his territories in Meſopotamia, by Palmyra and Damaſcus, it paſſed through Syria to the Weſt. After the conqueſt of Babylon by Cyrus, the Perſians, who were neither navigators to the Eaſt, nor attentive to their frontier on the weſt, ſuffered Babylon, Nineveh, and Opis, to ſink into ruin; the courſe of trade, therefore, returned to Arabia on the ſouth, to the Caſpian [226] and Euxine on the north: Idumêa became again the reſort of the caravans; and Tyre roſe out of its aſhes, till its power enabled it to maintain a ſiege of eight months againſt Alexander, in the career of his victories.

[225] Dionyſius is ſaid to be the verſifier of Eratoſthenes's Geography; if ſo, it is not quite a proof that it did exiſt in his time.

[226] See Strabo, p. 509. The trade paſſed by the Oxus into the Caſpian Sea, and from the Caſpian up the Cyrus and Araxes into the Euxine; in Juſtinian's time, by Dubios, a country eight days from Theodoſiopolis in Crimêa, where the trade from India, Iberia, and Perſia, meets the Roman merchants. Procopius de Bello Perſico, p. 149.

XXIII. ORIENTAL COMMERCE BY THE GULPH OF PERSIA.

WHAT views this Conqueror had after his firſt victories, we can only conjecture; but after his return from India, we may be aſſured that his comprehenſive mind had embraced all that vaſt ſyſtem which was afterwards completed at Alexandria. His ſucceſſors, the Ptolemies in Egypt, and the Seleucidæ in Syria, were rivals in this commerce; Palmyra, Damaſcus, and Antioch, all lie on the line of the caravans from the Perſian Gulph; the Caſpian and the Euxine were again frequented, and the commerce on this ſide enriched the kingdoms [227] of Pruſias, Attalus, and Mithridates; while the navigation on the Indian Ocean, built upon the ſame foundation, made Alexandria the firſt commercial city of the world. Egypt, maintaining its intercourſe with the Eaſt, in the firſt inſtance by means of the Sabêans, and finally, by fleets fitted out from its own ports on the Red Sea.

[227] It would be foreign to the preſent work to purſue the inquiry into this commerce, as carried on by land on the north. But it ſeems to have exiſted in the time of Herodotus, who mentions the trade on the Euxine conducted by interpreters of ſeven different languages: in the time of Mithridates *, 300 different nations met at Dioſcûrias in Colchis; and, in the early time of the Roman power in that country, there were 130 interpreters of the languages uſed there; but now, ſays Pliny, the city is deſerted; that is, in Pliny's age, the Romans would not ſuffer the Parthians, or any of the northern nations, to traffic by the Euxine, bût confined the whole trade to Alexandria, and the maritime intercourſe with India. See Herodotus, lib. iv. and Pliny, lib. vi. 5.

Dioſcûrias was on the Anthemus, one of the rivers that came out of Caucaſus into the Euxine.

Dioſcûrias was called Sebaſtopolis in Adrian's time, and the laſt fortification of the Roman empire. Arrian, who viſited it, mentions nothing of its trade. Arriani Periplûs Maris Euxini, p. 18. I find nothing of the Anthemus; but the Phaſis was navigable for thirty-eight miles. Second Periplus Eux. Sea, Hudſon.

* Marcian Heracleota. Hudſon, p. 64. ſays, that Timoſthenes wrote a very imperfect work on Geography, and Eratoſthenes copied him verbatim.

Timoſthenes was a Rhodian. See an Account of his Work, ibid.

In

In the following ages, the dynasty of the Arsacidæ divided these profits with the Romans; and in the decline of the Roman power, the revived Persian dynasty assumed such an ascendancy, that in the time of Justinian the Romans had recourse to the powers of Arabia [228] and Abyssinia, to open that commerce from which the Persians had excluded them; and when the Persian dynasty sunk under the power of the Chaliphs, the Mahomedan [229] accounts of the plunder found at Ctesiphon, prove the full possession of the Indian commerce by the Persians.

XXIV. CAIRO.

Upon the erection of two chaliphates, one at Bagdad, and the other at Cairo, the commerce of India was again divided; but the greatest part of the precious commodities which reached Europe, came through the hands of the Venetians from Alexandria, till the Genoese opened the northern communication again by means of the Euxine, the Caspian, and their settlement at Caffa in the Crimea.

[228] Procopius, lib. i. c. 20. mentions Justinian's application to the king of Abyssinia to obtain the importation of silk; but the Abyssinians could not effect this, the Parthians [Persians] having seized on the emporia. Paolino, p. 96.

[229] When Heraclius took Destagherd, the palace of Chosroes, he found in it aloes, aloes wood, mataxa, silk thread, pepper, muslins, or muslin frocks without number, sugar, ginger, silk robes, wove carpets, embroidered carpets, and bullion. Cedrenus, p. 418.—Μεταξα ..... Σηρὰν ῥήματα. Glycas, p. 270. who gives the same history of procuring silk-worms as Procopius.

When Sad, the general of Omar, took Ctesiphon or Modain, the carpet is particularly mentioned. See Abilfeda Reiske, 70; but other particulars are omitted.

XXV. CRUSADES.

In the eleventh and twelfth centuries, the Cruſades opened to the eyes of the Europeans the ſources of this Oriental wealth. The loſs of the kingdom of Jeruſalem enabled them to diſcover, that the power of Saladin was founded on the revenue derived from the commerce which paſſed through Egypt; and the work of Marin Sanuto [230] is a Memorial preſented to the Pope, and the principal ſovereigns of Europe, in order to inſtruct them, that if they would compel their merchants to trade only through the dominions of the chaliphs of Bagdat, they would be better ſupplied, and at a cheaper rate; and would have no longer to fear the power of the ſoldans in Egypt.

What thoſe ſovereigns did not, or could not do, was effected three centuries later by the diſcovery of the Cape of Good Hope: to this diſcovery Europe is certainly indebted for the decline of the Turkiſh power, which at that time threatened the whole Weſtern

[230] This curious work is inſerted in the Geſta Dei per Francos: it is highly intereſting, both upon account of the commercial intelligence it contains, and the clear-ſighted ſpeculations of the author. I owe the knowledge of it to Bergeron, who has cited it in his Treatiſe on Commerce annexed to his collection of Voyages, which is itſelf alſo a moſt valuable work. The editor of the Geſta Dei, &c. ſays, he had the Memorial of Sanuto, in two MSS. copies, from Scaliger and Petavius; that one of theſe was bound in velvet, and ornamented with claſps, &c. ſo as to aſſure him that it was one of the original copies, preſented by Sanuto himſelf to ſome one of the princes: if ſo, I imagine it contains the oldeſt map of the world at this day exiſting, except the Peutingerian Tables; for Marin Sanuto lived in 1324. His map, however, is wholly in the Arabic form; and, I conclude, built on one that he had procured when in Paleſtine. There is another Livio Sanuto, a geographer in the 16th century, whoſe work I have ſeen in the King's Library, but not examined; it ſeemed a valuable work for the age. In this Sanuto's time the India trade had ſettled again at Aden, where it was when the Romans deſtroyed that city 1300 years before. See lib. i. c. 1. The whole is worth conſulting.

world;

world; and the various other important conſequences which enſued, are too well known, and have been too well detailed in hiſtory, to require inſertion in the preſent work.

Of the interior of Arabia we know little to this day; but that, notwithſtanding the danger of robbery, caravans of great value traverſed it in all ages, we have certain evidence to depend on. Previous to the Periplûs, we have the teſtimony of Strabo and Agatharchides; in the middle ages, the account of Al Edriſſi; and, in our own time, we want no other proof than the Engliſh importations at Jiddah, which reach Mecca at the time of the Pilgrimage, and from thence ſeem to be diſperſed over the whole peninſula.

At Grane likewiſe, in the north-weſt angle of the Perſian Gulph, there has been a conſiderable importation till within theſe few years; and at El Catif, near Bahrain, which is the Gerrha of the ancients, there is ſome commerce beſides the returns for the Pearl Fiſhery; but with the progreſs of which, inland, we are unacquainted.

Somewhere in the neighbourhood of Grane was the ſeat of Abdul Wahab, who, with his army of deiſts and democrats, has plundered Mecca within theſe three years, upon the ſame principle as his brethren in Europe demoliſhed the Church of their own country, and with much the ſame event to the plunderers; for Abdul Wahab is ſaid to have fallen by the hands of an aſſaſſin, as the firſt democrats of France have moſtly periſhed in the courſe of the revolution.

XXVI. GERRHA.

GERRHA is one of the few towns in Arabia that Pliny has enabled us to fix with certainty; for he comes down the weſtern coaſt of the gulph, which, he ſays, was never explored till viſited by Epíphanes; and which is little known to any now except the natives: but Pliny, after paſſing the iſland of Ichara, and one or two obſcure places, mentions Gerrha as a city five miles round, and the walls or towers built of foſſil [231] ſalt. This is a circumſtance true (I think) only at Ormus and El Katif, which, added to the ſize of the city, aſcertains its identity. It is neceſſary to be particular in this reſpect, becauſe the Gerrhêans are the firſt conductors of the caravans upon record; and it is highly probable, that long previous to hiſtory they enjoyed the profits of this traffic; for Agatharchides [232], who firſt mentions them, compares their riches with thoſe of the Sabêans; and adds, that they brought much wealth into Syria, which was at that time ſubject to Ptolemy; and furniſhed a variety of articles for the induſtry of the Phenicians. By this we underſtand, that they croſſed the whole peninſula to Petra in Idumêa, from which city we know that the intercourſe was open with Tyre, Phenicia, and Syria. Strabo [233] informs us, that they were the general carriers of all the produce of Arabia, and all the ſpices, or aromatics; but he adds likewiſe, that Ariſtobûlus contradicts this, and ſays, that they go up the

[231] Strabo alſo, lib. xvi. p. 766. Charræ had the ſame uſe of foſſil ſalt, Plin. xxxi. 7.

[232] Hudſon Geog. Min Agatharchides, p. 64. ἰκτεταμευμένων πᾶν τὸ πίπτον εἰς διαφορᾶς λόγον ἀπὸ τῆς Ἀσίας καὶ τῆς Εὐρώπης, the factors for all the precious commodities of Aſia and Europe.

[233] Ἡ ξυμπορεύεται δ' ἐστὶν ὑπὸ Γερραίων τὸ πλέον τῶν Ἀραβίων φορτίων καὶ τῶν Ἀρωματικῶν. Lib. xvi. p. 766. The Gerrhêans are the travelling merchants in caravans, and bring the produce of Arabia, and the ſpices of India.

Euphrates in boats, to Babylonia and Thapſacus, and from thence diſperſe their commodities in all directions by land. Both theſe relations may be true, as applied to different periods, in conſequence of the obſtructions they might meet with in their courſe, from the different powers of the ſeveral countries through which they were to paſs [234].

The Gerrhêans, we may naturally ſuppoſe, from their ſituation in the Gulph of Perſia, and from their proximity to the oppoſite coaſt of Perſis and Karmania, would lie more convenient, and more directly in the route of communication with the Eaſt, than any other tribe. And, as Agatharchides ſays, that the Minêans and Gerrhêans both met at Petra as a common centre, we have two routes acroſs the peninſula, correſpondent to the two ſorts of commerce, which ought naturally to paſs in different directions: for from Gerrha, the produce of India; and, through the country of the Minêans, the frankincenſe of Hadramaut; would regularly be directed to Idumea.

XXVII. MINÊANS.

THE ſite [235] of the Minêans is not eaſy to fix; but by a compariſon of different accounts, they were ſouth of Hedjaz, north [236] of Hadramaut, and to the eaſtward [237] of Sabêa; and they were the carriers to all theſe provinces: their caravans paſſed in ſeventy days

[234] See Al Edriſſi, p. 121.

[235] Bochart Phaleg. p. 121. places them at Carno 'l Manazoli, ſuppoſing it to be the Carna or Carana of Pliny. Ptolemy places them much farther ſouth. Carno 'l Manazoli is but three ſtations ſouth of Mecca. Al Edriſſi.

[236] Atramitis in Mediterraneo junguntur Minæi. Pliny, vi. 28.

[237] Dionyſius places them on the coaſt, but I think Dionyſius alone.

from

from Hadramaut to Aila, as we learn from Strabo [238]; and Aila is but ten miles from Petra. The commodities brought by this caravan would be aloes, gold, myrrh, frankincenſe, and other precious gums or aromatics; while thoſe from Gerrha would conſiſt of cottons, ſpices, and the produce of the Eaſt.

As navigation encreaſed on the coaſt, this mode of intercourſe, and its profits, would naturally diminiſh. When the Ptolemies ſent their fleets to Sabêa; when the Greeks, Egyptians, or Romans, reached India by the monſoon, the greateſt part of what had paſſed through Arabia would be diverted into a new channel; in the ſame manner as the diſcovery of the Cape of Good Hope ruined the commerce of Alexandria. But that ſome intercourſe exiſted, and that ſome caravans traverſed Arabia, both in the middle ages, and do traverſe it even to this hour, is a fact that cannot be diſputed.

After the conqueſt of Perſia by the Mahomedans, a road was made acroſs the whole of the peninſula, from Mecca [239] to Kufa: it is reported to have been ſeven hundred miles long, marked out by diſtances, and provided with caravan ſerais, and other accommodations for travellers. Into this road fell the route from Baſra, and from El Katif or Gerrha. The province of which El Katif is the capital, is called Bahrain [240] by Al Edriſſi, from the two iſlands of that name which are the principal ſeat of the Pearl [241] Fiſhery. He ſpeaks of El Katif as a conſiderable city in his time; and he gives the routes

[238] Lib. xvi. p. 768. the time ſeems in ceſs; but as the diſtance is taken from Hadramaut to Aila, it may not exceed the proportion of 60 days from Minêa to Nera, attributed to Gallus.

[239] From Mecca to Bagdat, according to Abilfeda Reiſke, p. 154. wells, lakes, miles, poſts, for 700 miles. See Gibbon, v. 409. the road was made by Ol Madi Khaliph, anno Hejræ 169, the poſt goes in eleven days.

[240] Bahrain, in Arabick, ſignifies the two ſeas.

[241] Tylos margaritis celeberrima. Plin. vi. 28.

from it ſouth to Sohar, north to Baſra, and weſt to Medina [242]; the country on the ſide towards Baſra is a deſert ſeldom frequented by merchants, without villages, and inhabited only by Bedouins. But the route to Medina falls into the road that leads from Baſra; and both Baſra and El Katif are at equal diſtance, that is, twenty ſtations from that city, where is the ſepulchre of Mahomet. The road from Baſra falls into that from Kuſa at Maaden [243] Alnocra. I mention theſe circumſtances, in order to ſhew the communications with El Katif, or Gerrha, in the middle ages; becauſe they cannot be diſſimilar from thoſe which were open when Gerrha was a centre of Oriental commerce; and the route which led to Medina requires only a little tendency to the north, to make it the ancient line of intercourſe between Gerrha and Aila, and from thence through Petra [244] to Egypt, Tyre, and the coaſts of the Mediterranean.

XXVIII. ANTIQUITY OF ORIENTAL COMMERCE.

So far as a private opinion is of weight, I am fully perſuaded that this line of communication with the Eaſt is the oldeſt in the world; older than Moſes or Abraham. I believe that the Idumêans, who were carrying ſpices into Egypt when they found Joſeph in their

[242] There is another route ſuppoſed to be intimated in Strabo, from Gerrha to Hadramaut; but the reading, inſtead of Γερραῖοι, is Γαζαῖοι, which, Salmaſius ſays, ought to be Γαζαῖοι, from Gaza to Hadramaut forty days. If this were ſo, it contradicts another paſſage of Strabo, where he ſays, the Minêans were ſeventy days in going to Elana, which is a leſs diſtance. It ſeems highly probable that the Gerrhêans are meant in this place; for, as they were general carriers, it is probable they went to Hadramaut as well as in other directions.

[243] A Baſra ad Medinam viginti ſtationes et hæc via coincidit cum extremitate Kufa, prope Maaden Alnocra, p. 121.

[244] Petra was only ten miles from Aila. Bochart Phaleg. 686.

way,

way, obtained theſe ſpices by this very route. And if it is agreeable to analogy and to hiſtory that merchants travelled before they ſailed, there is no courſe from India to the Mediterranean where ſo ſmall a ſpace of ſea muſt be traverſed as in this direction. Karmania is viſible from Arabia at the ſtraits of the Gulph of Perſia; and in the infancy of navigation, the ſhorteſt paſſage would be preferred. The interior of Arabia, in all ages, contained Bedouins, whoſe profeſſion was robbery; but the different tribes of robbers probably received a caphar inſtead of ſeizing the whole; as they do to this day of the caravans which paſs between Baſra and Aleppo. They are likewiſe not fond of fighting for the whole, when they can obtain a tribute for a part; and neceſſity would compel the merchants of thoſe ages, as well as our own, to go in large bodies, and provided with arms for their defence. The manners of the Arabs have never changed; and it is reaſonable to conclude, that merchants who have to treat with Arabs have changed as little in their precautions. Pliny [245] has preſerved the memorial of theſe uſages in the ſouthern part of the peninſula; and there is every reaſon to conclude that they exiſted in all ages, before his time, as they do to the preſent hour.

It was to obviate theſe exactions that plans were formed to open a communication by ſea. The Tyrians, as the principal merchants on the Mediterranean, and as the intermediate agents of Oriental

[245] Ibi decimas Deo, ... regi vectigal, . . . canis penditur.—I appeal to every Engliſh traveller, who has ever paſſed between Baſra and Aleppo, if this is not an exact picture of the extortions practiſed upon a caravan; and yet caravans ſtill paſs, and ſtill make a profit on their merchandize—the conſumer pays for all.

ſacerdotibus portiones, ſcribiſque regum . . . . ſed præter hos, et cuſtodes, ſatelliteſque & hoſtiarii [Oſtiarii] populantur. Jam quocunque iter eſt, aliubi pro aqua, aliubi pro pabulo, aut pro manſionibus, variiſque portoriis pendunt . . . . . iterumque imperii noſtri publi-

commerce, either firſt conceived the idea, or derived it poſſibly from the Egyptians, whom we muſt ſuppoſe to have had an intercourſe with India whether hiſtory records it or not. The firſt hiſtorical account we have is, the trade of Ophir. The alliance between Hiram and Solomon was indiſpenſable; for Solomon was maſter of Idumêa, and the Tyrians could eſtabliſh themſelves at Ezion Geber only by his permiſſion and aſſiſtance. Solomon furniſhed the opportunity, and Hiram the ſhips; the profit accrued to the partnerſhip; and if this voyage were made to Ophir in Arabia, where it is univerſally confeſſed there was an Ophir, even by thoſe who ſearch for Ophir in Africa and India; ſuch a voyage would at leaſt obviate all the exactions attendant upon a communication by land, and place Hiram and Solomon in the ſame ſituation as the Ptolemies ſtood, before a direct communication was opened between Berenikè and the coaſt of Malabar.

This rapid ſketch of Oriental Commerce in all ages, as far as it can be traced upon hiſtorical evidence, is no digreſſion, but an eſſential part of the work I have undertaken: my object has been, not merely to elucidate the Periplûs by a commentary, but to trace the progreſs of diſcovery to its ſource; a ſubject curious and intereſting at leaſt, if neither uſeful or lucrative. But to know what has paſt in remote ages is the purpoſe of all hiſtory; and to collect, from a variety of ſources, ſuch intelligence as may enable us to diſtinguiſh truth from falſehood, if it has not the dignity of hiſtory, has at leaſt a claim to approbation from thoſe who know how to appreciate the labour of reſearch, and the fidelity of inveſtigation. Much that has been ſaid may be controverted in particulars, and yet be correct upon the whole. I am not conſcious of any preconceived

ſyſtem

ſyſtem in my own mind, but have raiſed a ſuperſtructure upon the foundation of hiſtorical facts: theſe I have not warped, in order to accommodate them to an individual opinion; but have followed them wherever they led. I claim little merit but in concentrating theſe to a point; and if the ſame evidence ſhould not produce the ſame conviction on others, I ſhould as readily give way to thoſe who are poſſeſſed of ſuperior information, as I ſhould maintain my ground againſt thoſe who are pretenders to the ſcience.

XXIX. CONCLUSION.

It is now neceſſary to bring this Book to a concluſion, in which the courſe of ancient navigation has been traced from the Gulph of Aila to the mouth of the Euphrates[246], embracing the whole ſea-coaſt of Arabia on its three ſides. The author does not appear, from the intĕrnal evidence of his work, to have perſonally explored the eaſtern coaſt of the Red Sea, or the weſtern ſhore of the Gulph of Perſia: he ſeems to have come down the Red Sea from Myos Hormus to Okêlis; or perhaps from Leukè Komè, but to have touched little upon the coaſt till he came to the Burnt Iſland. On the ſouthern coaſt of the peninſula we can trace him, at almoſt every ſtep, to Fartaque, and to Ras-el-had; but from thence he ſeems, without entering the Gulph of Perſia, to have ſtretched over with the monſoon, either to Karmania, or direct to Scindi, or to the Gulph of Cambay. At thoſe points we find him again entering into thoſe minute particulars, which beſpeak the deſcriptions of an eye-witneſs; while, of the parts previous to theſe, he ſpeaks in ſo

[246] Properly the Tigris.

tranſient

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[246] Properly the Tigris.

tranſient

tranſient a manner, as to create a belief that he writes from the report of others; but on this queſtion it is not neceſſary to decide, the reader muſt determine for himſelf. On the two coaſts of Arabia which he has touched but ſlightly, I have endeavoured to fill up the outline which he has ſketched; and on the third ſide, where he has entered into detail, I have endeavoured to follow him, ſtep by ſtep, as minutely as I have been able. But if the interior of Arabia is a deſideratum in Geography, the coaſt likewiſe is far from being accurately defined: no ſhips from Europe now viſit it for the purpoſe of trade; and thoſe which come from India to Mokha or Jidda, ſeldom touch upon the coaſt towards the ocean, unleſs to obtain proviſions when in diſtreſs. What information may be obtained from the Engliſh cruizers which have lately been in the Red Sea, and were at one time preparing to fortify Perim in the Straits, is expected with a great degree of curioſity. Commodore Blanket, who was upon this ſervice, was an officer of much ſcience and great experience: he may have ordered ſurveys upon this coaſt, or ſome examination of it, which may clear up ſeveral of the difficulties which remain. In the mean time, I have made uſe of ſuch lights as are afforded by the papers and journals of the officers of the Eaſt India Company, and which are collected in the work called the Oriental Navigator. Thoſe who know the abilities and ſcience of thoſe excellent officers, will think their obſervations might have been ſufficient for ſuch an examination as I had inſtituted; but ancient navigators kept much nearer the coaſt, and noticed objects which are of ſmall importance in the preſent ſtate of the ſcience. A minute particular often forms a characteriſtic of a port, a bay, or a ſhore, which we cannot hope to find in the common obſervations of modern

modern officers, nor elſewhere, unleſs when an actual ſurvey has taken place. In the voyage of Nearchus, as my own knowledge increaſed, I conſtantly found a greater correſpondence in his Journal with the actual ſtate of the coaſt: I have not been * quite ſo fortunate in the preſent inſtance; nor do I think the author of the Periplûs to be compared with the Macedonian commander, but ſtill he is, as Voſſius ſays, the only ancient author who has given a rational account of the countries or coaſts he has deſcribed; and in this, if we

ADDITIONS.

* Sir Home Popham's Chart of the Red Sea, which I obtained after the printing of this ſheet, induces me to recall this aſſertion in ſome degree; for in that chart a plan of the harbour, and a view of the town of Aden, is given, which identifies it to demonſtration with the place called Arabia Felix in the Periplûs. "It lies," ſays the author, "twelve "hundred ſtadia from the ſtraits: it has very "convenient anchorage, and affords excellent "water; and it is ſituated juſt at the entrance "of the bay, ſo as to remain diſtinct, and in "ſome meaſure ſeparated from the country "along the ſhore." [Τῷ τὴν χώραν ὑποφέυγειν.] Now, a reference to Sir H. Popham's Chart preſents us with a peninſula, joined to the main by a very narrow neck, and adjoining to a river, which may afford the ſupply of water alluded to; and if Arabia Felix was placed on the weſtern, inſtead of the eaſtern point of the peninſula, where Aden now ſtands, it would lie at the very entrance of the bay, as is ſpecified: the difficulty, likewiſe, of approach to it from the adjoining coaſt, is ſufficiently enſured by the narrowneſs of the neck. The diſtance from the ſtraits is alſo accurate, within five miles.

P. 311.

CORRECTIONS.

P. 275. note 113. Negra is not Nera, but Najeran. See p. 277. note 118. And, according to the Roman Martyrology, St. Arethas was put to death at that place by Dunaan, a Jew, and king of the Homerites. His cruelty is noticed in the Koran, where he is called the Lord of the Fiery Pits. Eleſbaas, the king of Abyſſinia, revenged the death of Arethas, conquered the Homerites, and put Dunaan to death.

P. 293. The Straits of Bab-el-Mandeb are ſaid to be ſix miles wide; but in Sir H. Popham's Chart they are only two miles.

P. 290. In the Table for the Coaſt of Arabia, I ſee with concern a conſiderable difference in the latitudes there given, compared with thoſe of Sir H. Popham's Chart. I had followed the beſt authority I knew of; but they muſt now be conſidered as relative, and not real determinations.

P. 311.

we are able to purſue his ſteps and elucidate his narrative, it is the performance of a ſervice as gratifying to the curioſity of the Learned, as acceptable to the ſcience of Geography.

ADDITIONS.

P. 311. Koródamon is ſuppoſed to be Ras-el-had, as it is the eaſternmoſt point of Arabia in Ptolemy; and its form would appear Greek, if we could find in that language Κᾶυρος, or Κῶρος, or Κόρος, equivalent to the Latin Corus or Caurus; for then it might be the point that terminates, or *ſubdues* the *weſterly* monſoon, as Gardefan ſeparates the two monſoons on the coaſt of Africa; but Κόρος is not the name of a wind in Greek; neither am I informed whether Ras-el-had ſeparates the monſoons.

CORRECTIONS.

P. 311. lin. 20. The Bay Sachalites, mentioned here, looks as if the author of the Periplûs had two bays of the ſame name, prior and ulterior, as Al Edriſſi has; but there is no collateral proof of this.

Ancient names *in Roman Capitals*
Modern names *Italicks or small Roman letters*
Dubious names ?

Division *of the* Provinces *of* India
Parthians. *at* Minnagara *on the* Indus. Masters *of* Scindi Kutch & Guzerat *as far as the* Tapti & Surat
Ariake. Concan *or* Kemkem *from the* Tapti *to Cape* Ramas
Limyrike. Canara *from Cape* Ramas *to* Deela.
Pandions Kingdom. Malabar. Ali *of Ptolem.*
Paralia. Travancore *to Cape* Comorin
Paralia Sore tanum. Coro mandel

HINDOSTAN

PENINSULA of INDIA

INDIAN OCEAN

ARABIA FELIX

ARABIA

AETHIOPIA

MINNAGARA

PARTHORUM REGNUM

OZENE Ougein

BARUGAZA

LAMBAI'S El.

NAMADUS Prol. Nerbudda

NASAGUNA Prol.

Baroach

Tapti R.

Surat

KAMMONI Vicus

ARIAKE

KEMKEM

MAMBARI REGNUM

TAGARA Deoghur - *the Hill or Seat of the Gods*
Elore
or Dowlatabad

KALLIENA
Kallian

Bombay

Banda Rajapoor

PALAIPAIMAI.m

MELI ZEIGARA Prip.

Zeigur Siddee

Rajapoor

ZIGERIS

PALAIPATNAI

CONCAN

Gheriah Vizindruck

Vingorla

SESPEREINAI
Burnt Islands

GOA

EICIDION Inf.

KAINETON Inf.
Marmagon

CHERSONESE
Sonda
Carwar

LEUKE
Angedivi

NAGORA

NAGORA

TUNDIS

Barcelore

MUZIRIS

Mangaloor

Deeda Limyr. of Malabar

Neli-ceram

NELKUNDA
ELA BARAKE
MONS PUBRHUS

Culicut
BALITA

Cochin

CANARA

MALABAR

DIONIS REGNUM

PARALIA

TRAIANOPOLIS
PARALIA

Tutucorin

Madura

PANDIONIS REGIA

Coulan

Anjengo

Calecut
Coulam

ROMAN PROM.
C. Comorin

PEARL FISHERY

CORO MANDEL

PARALIA SORE TANUM

Paliacat

Madras
St Thome
Brettuns
the Arabs

MALARPHA
Melapore

Poduka

Khaberis Pot.
Cavery

KAMARA

NIGAMA Prol.
Kalamedu

Negapatnam

Ramanan Coil

Ramisseram

P. Pedro

TAPROBANE

SALIKE

PALAE SIMOONDUS

Pointe de Galle

Goadavery Pot.
Tenus inse
Solvori inse
Chryses Aurigenis

MASALIA
Masulipatan

Ptolemy Map

Modern Map

Hodie Mocha

Hodie Aden

Hodie Babel Mandel

Hodie Cape Guardafui

Hodie Cape Fartaque

Hodie Cape Rosalgate

Hodie Cape Mussendom

Hodie Cape Jasques

Hodie Cape Verd

Hodie Cape Comorin

Hodie Cape Ras el Had

Hodie Cape Ras el Hadd

Hodie Cape Ramas

Hodie Cape Delli

Hodie Cape Negrais

Hodie Cape Gardafui

Hodie Cape Orfan

Hodie Cape Monze

Hodie Cape Jagat

Hodie Cape Gundel

Hodie Cape Calimere

Hodie Cape Palmyras

Hodie Cape Pagoda

Hodie Cape Sandy Point

Hodie Cape Romania

Hodie Cape Negapatnam

Hodie Cape Ramanancoil

Hodie Cape Ramisseram

Hodie Cape Calymere

Hodie Cape Point de Galle

Hodie Cape Pedro

Hodie Cape Taprobane

Hodie Cape Salike

Hodie Cape Palae Simoondus

Hodie Cape Pointe de Galle

Hodie Cape Chryses Aurigenis

Hodie Cape Masulipatan

Hodie Cape Melapore

Hodie Cape Madras

Hodie Cape Paliacat

Hodie Cape Poduka

Hodie Cape Khaberis

Hodie Cape Kamara

Hodie Cape Nigama

Hodie Cape Kalamedu

Hodie Cape Negapatnam

Hodie Cape Ramanancoil

Hodie Cape Ramisseram

Hodie Cape P.

THE

PERIPLUS

OF THE

ERYTHREAN SEA.

INDIA.

BOOK IV.

I. *Introduction.*—II. *Courſe from Oman in Arabia up the Gulph of Perſia, or to Karmania.*—III. *Omana in Karmania.*—IV. *Courſe to the Indus.*—V. *Scindi, Minnágara, Barbárikè.*—VI. *Cutch, Guzerat, Barugaza.*—VII. *Kingdom of Bactria, Tágara, Plíthana, Ozénè, Dekan.*—VIII. *Aríakè or Concan, the Pirate Coaſt, Akabaroos, Oopara or Súpara, Kalliena or Bombay, Semulla, Mandágora, Palaipatmai, Melizéigara, Tóparon, Turannos-boas, Seſekréienai, Aigidii, Kainéitai, Leukè.*—IX. *Limúrikè or Canara, Naoora, Tundis, Nelkunda, Ela-Bákarè.*—X. *Kingdom of Pandion,* XI. *Hippalus, and the Monſoon.*—XII. *Balíta, Cómarei, Kolkhi, Pearl Fiſhery.*—XIII. *Ceylon.*

I. THE productions of India, and the Eaſtern World, are not ſought after with greater avidity at the preſent hour, than they were by the inhabitants of Europe in the remoteſt ages, and all the nations which encircled the Mediterranean. Luxury this was called by the philoſophers and patriots both of Greece and

Rome. But if every thing that is foreign is luxurious, there could be no commerce in the world; and if every thing which is not ſtrictly neceſſary for the ſupport of life be ſuperfluous, thirſt might be ſatisfied without wine, and food digeſted without the addition of a reliſh. In this view, the moſt ordinary accompaniments of the table ſhould be diſcarded; and ſalt and pepper ſhould be enumerated among the gratifications[1] of a ſenſual appetite. But if both are ſtimulants, ſtill they are no leſs ſalutary than grateful; and no reaſon can be given why ſalt ſhould be conſidered as ſacred at the table of the Greeks and Romans, while pepper was condemned as the indulgence of a voluptuary; unleſs that the one was a domeſtic produce, and the other an exotic. But barbarians were not to be enriched at the expence of Europe, and the Roman world was not to be impoveriſhed for the attainment of Oriental luxuries;—certainly not, if the ſword could retain as eaſily as it acquires; but the wealth acquired by rapine muſt of neceſſity revert again into the channels of commerce; and commerce, whether it tends to the Eaſt or to the Weſt, will impoveriſh every nation which has no native induſtry to replace its demands. Rationally ſpeaking, all commerce conſiſts in the exchange of ſuperfluities; and luxuries are as eaſily introduced by dealing with nations nearer home, as with thoſe at a diſtance. There is as little reaſon for declaiming againſt the Alexandrians who purchaſed pepper in India with the gold of Egypt, as againſt the Athenians, who exchanged the ſilver of Laureum for the ſalt of Sicily or Crete.

[1] Of pepper Pliny ſays, Uſum ejus adeo placuiſſe mirum eſt . . . . . ſola placere amaritudine et hanc in Indos peti; quis illa primus experiri cibis voluit, aut cui in appetenda avidiate eſurie non fuit ſatis . . . et tamen pondere emitur ut aurum vel argentum. Lib. xii. c. 14 Hard.

Pliny

Pliny complains that the Roman world was exhauſted by a drain of four hundred thouſand pounds[2] a-year, required for the purchaſe of luxuries, equally expenſive as ſuperfluous: what would he have ſaid of the expenditure of our ſingle iſland, conſiſting of two millions, for the purchaſe of tea only in China, without comprehending any other of our inveſtments in the Eaſt? And yet this, and all the other luxuries we import, do not impoveriſh us; becauſe we export on the one hand as we receive on the other; and, ſo far as we are the principal carriers between the Eaſtern and the Weſtern world, we ſtand in the ſame ſituation as thoſe ancient nations held, which were the medium between India and the Roman empire, but with an hundred times more trade, more induſtry and capital.

As Providence has varied the temperature of different climates, ſo has it given to man a predilection for ſuch things as are not the produce[3] of his native ſoil. The wildeſt tribes of America admit traders into their country, and allow them to paſs through it with ſecurity; the Scythians[4] likewiſe, according to the earlieſt teſtimony of hiſtory, ſuffered the merchants of the Euxine to penetrate farther on the eaſt and north, than we can trace their progreſs by the light of modern information.

In civilized countries, this appetite increaſes in proportion to our

[2] H. S. quingenties, near 403,645*l.* lib. vi. 23. quæ apud nos centuplicato veneunt, 40,364,500*l.*; and again, lib. xii. 18. the balance againſt Rome for the produce of India, Seres, and Arabia, millies centena millia ſeſtertium, 800,000*l.* tanto nobis deliciæ et fœminæ conſtant. The prime coſt of cargoes in India and China is now 3,000,000*l.* Rennell's Mem. Introd. p. 36.

[3] Tanta mortalibus ſuarum rerum ſatietas eſt, et alienarum aviditas. Plin. xii. 19.

[4] See the Introduction to the Third Book of Herodotus, as a proof of the courage, induſtry, and abilities, of the Greek merchants, as well as of the extent of ancient diſcovery towards the north, relative to the Danube, the Euxine, the Palus Mœotis, the Don, and the Wolga, illuſtrated by the commentary of Rennell, and diſplayed with much learning and accuracy of inveſtigation.

knowledge,

knowledge, and the opportunity of procuring the variety which we covet. The indulgences of the palate are among the firſt ſtimulants of this emotion; and ſecond to theſe is all that can delight the eye, or the mind, by novelty, beauty, variety, intrinſic or imaginary value. Exceſs of indulgence, avidity of poſſeſſing, profuſion in acquiring, and wantonneſs in uſing, this variety of foreign articles, are both vicious and luxurious; but where to fix the limit between the uſe and the abuſe, is a queſtion more difficult to determine than we are aware of. Pliny condemns, above meaſure, the vanity of purchaſing pearls and precious ſtones for the ornament of the Roman women; while he extols the works of art in ſculpture, painting, and engraving, with all the enthuſiaſm of an admirer. But if every thing is luxurious that is not neceſſary to our exiſtence, the ornamenting of a houſe is certainly not more uſeful or more rational than the decoration of a woman. And if the works of art are a ſpecimen of human abilities, pearls, diamonds, and precious metals, are the gift of the Creator: the things themſelves are indifferent; the temperate [5] uſe of them embelliſhes life, and it is only the abuſe of them which becomes avarice, prodigality, or folly.

The activity produced by the interchange of ſuperfluities, is the glory of commerce, and the happineſs of man; but if its merits were to be fixed by the ſtandard of utility alone, very narrow would be the limits within which the defence of it, by its warmeſt advocates, muſt be confined. Uſe we can diſcover none in the burning of tin foil before an idol in China; and yet this practice of a nation at one extremity of the world gives bread to thouſands at the other,

[5] The poet underſtood this better than the philoſopher, when he ſaid, Nullus argento color eſt, niſi *temperato* ſplendeat uſu,

ſupports

ſupports the mariner during a voyage of eleven thouſand miles, and procures for Britain, by means of a native metal, what ſhe muſt otherwiſe have purchaſed by an imported one.

Moral and philoſophical reaſoning, however, upon this queſtion, has had little weight in determining the general practice and habits of mankind. The prevailing taſte implanted in our nature has made the pepper of Malabar, and the cinnamon of Ceylon, articles of requeſt, from the time of Moſes to the preſent hour; the finer ſpices of the Moluccas grew equally into favour, in proportion as they became known; and the more modern demand for the tea of China, and the ſugar of the Eaſt or Weſt Indies, will never ceaſe, but with the impoſſibility of procuring either of thoſe articles, by the deſtruction of all intercourſe between the ſeveral nations of the world.

It has been ſhewn in the preceding pages, how the precious commodities of the Eaſt were procured, from the earlieſt periods that hiſtory can reach; and no revolutions of empire, either in the ancient or modern world, have ever been able to ſtop all the means of communication at once: the channels obſtructed in one direction, have been opened in another. Tyranny, avarice, and extortion, have defeated their own ends: the monopoly of one country, as it grew intolerable, was transferred to others that were leſs oppreſſive; fluctuating generally between the Red Sea, and the Gulph of Perſia; and driven ſometimes to the North, by the exactions common to both. Such was the fate alſo of the laſt monopoly between Egypt and Venice, which, by its enormity, drove the Portuguele to the diſcovery of the communication by ſea; and this channel once opened, can never be cloſed; the whole world are partakers in the

benefit; and Britain has the pre-eminence, only becauſe ſhe has the greateſt induſtry, the largeſt capital, and the ſuperiority of naval power.

It is a political conſideration, awful to contemplate, and difficult to diſcuſs, but ſtill neceſſary to keep conſtantly in view, when we reflect how deeply all the intereſts of our country are concerned in the continuance of the pre-eminence we at preſent enjoy. Our poſſeſſions in India are almoſt become a part of our exiſtence as a nation: to abandon them is impoſſible; to maintain them—a perpetual ſtruggle with the native powers, and the powers of Europe to ſupport them. It requires all the vigilance of government, and all the vigour of the controuling power, to take care that the natives ſhould not be diſcontented under our empire; and that the nations of Europe ſhould not be outraged by our approach to monopoly. Theſe conſiderations, however, are totally diſtinct from the commerce itſelf, and totally foreign to the object of the preſent work: I touch them only as they ariſe, and return with pleaſure to the humbler office of a commentator on the Periplûs.

II. COURSE FROM OMAN, IN ARABIA, UP THE GULPH OF PERSIA, OR, TO KARMANIA.

We have now our choice of two courſes; one up the Gulph of Perſia to Bahrein and Oboleh, and the other acroſs the open ſea from Arabia to Karmania; where we arrive, after a paſſage of ſix days, at the port of Omana. This port manifeſtly takes its name from the province of Oman in Arabia, and was doubtleſs a colony of Arabs, eſtabliſhed on the coaſt oppoſite to their own, for the purpoſe

purpoſe of approaching nearer to Scindi and India, or as an intermediate port on their voyage outward, and homeward bound. Whether the merchant, whoſe journal we are examining, ever went up the Gulph, or touched at the port of O'mana, is highly problematical. If he was there, he has left us but ſlender particulars of the place; but there are ſome circumſtances which induce a perſuaſion, that he paſſed from Arabia, either to the Indus or Barugaza, at a ſingle ſtretch; for, in the firſt place, he has fixed O'mana in Perſis, which muſt of neceſſity be either in Karmania or Gadroſia; and, added to this, his account of Oraia, in the latter province, is too obſcure to prove any intimate knowledge of the country.

III. ÓMANA IN GADROSIA.

O'MANA we recover a trace of in the Kombana [6], or Nommana, of Ptolemy, in the province of Gadroſia [7], and in the bay he calls Paragon, to the eaſtward of Karpella [8], or Cape Bombareek. I have proved, in the Voyage of Nearchus, and in the former part of this work, that the Arabs had viſited this coaſt previous to all the navigation of the Greeks; but this O'mana is not mentioned by Nearchus, and was therefore a colony eſtabliſhed between his time and the date of the Periplûs. Its immediate repreſentative cannot be now aſcertained; but its relative ſituation may be aſſigned from

[6] Kombana, in the Greek copies; Nommana, in the Latin.

[7] Pliny makes it a city of Karmania: Oppidum O'manæ quod priores celebrem portum Carmaniæ fecere. Lib. vi. 28. Ptolemy does the ſame; but Nearchus commences Karmania only at Dagaſira.

[8] Ptolemy ſometimes writes this Karpela, which, I think, ſignifies the Pierced Mountain, ſuch as Bombareek is. The Latin text is Karpella.

Ptolemy, between the River [9] Iſkim and Muckſa; ſo that it muſt be in Gadroſia, and not many leagues eaſt from Cape Jaſk.

There is a regular intercourſe between Barugaza and this port, which extends alſo to Oboleh, at the head of the Perſian Gulph. The imports conſiſt of

Χαλκοῦ,	- - - -	Braſs.
Ξύλων Σαγαλίνων [10],	- -	Sandal Wood.
Δοκῶν,	- - - -	Wood ſquared; perhaps Δοκῶν Σανδαλίνων.
Κεράτων,	- - - -	Horn.
Φαλάγγων [11] σησαμίνων,	- -	Ebony in round ſticks.
Φαλάγγων Ἐβενίνων,	- -	

Except ebony and ſandal wood, there is nothing appropriate in this cargo.

But it is added, that a particular ſpecies of veſſels called Madarátè were built here for the Arabians, the planking of which was ſewed together without nails, like thoſe already deſcribed on the coaſt of Africa. Veſſels of this kind, called Trankies, and Dows, are ſtill in uſe; and they were formerly built in Africa or Gadroſia, we may conclude, becauſe Arabia furniſhes few materials for the conſtruction of ſhips.

The only import from Kanè was Frankincenſe; while both [12] from Oboleh and O'mana great quantities of Pearl were exported, but of an inferior ſort, to Arabia and Barugaza; and beſides this,

[9] That is, the Sarus and Dagasira.

[10] Σαγγαλίνων, eaſily corrupted from Σανδαλίνων.

[11] Σησαμίνων is evidently a corrupt reading. Wood of ſome ſort is meant, but ſeſamum is a herb. Salmaſius tried to explain it, but left it undetermined. Σησαμίνα ξύλα are, however, mentioned by Coſmas.

[12] Ἀπὸ ἑκατέρων τῶν ἐμπορίων, from *either port*, which I apply to Oboleh and Omana, becauſe they were before joined ὡς ἀμφότερα ταῦτα ἐμπόρια.

Πορφ

Πορφύρα,	-	-	-	Purple.
Ἱματισμὸς ἐντόπιος,		-	-	Cloth of native manufacture.
Οἶνος,	-	-	-	Wine.
Φοῖνιξ πολὺς,		-	-	Dates, in large quantity.
Χρυσὸς,	-	-	-	Gold.
Σώματα,	-	-	-	Slaves.

After leaving the diſtrict of O'mana, the country [11] which ſucceeds belongs to another government; and there is a bay which is called the Bay of the Terabdi, formed by the coaſt trending inwards, in the middle of their territory.

IV. COURSE TO THE INDUS.

This Bay of the Terabdi anſwers to the Paragôn of Ptolemy, although there is in reality no bay on the coaſt. No extent is given to that of the Periplûs; but the Paragôn of Ptolemy extends from Karpella to Alambateir, or Guadel. Doubtleſs this is an error ariſing out of the form of the coaſt upon approaching the Gulph of Perſia; and if we ſuppoſe the ancient courſe of the paſſage from Arabia to Karmania to have been made acroſs, without approaching the Straits, the apprehenſion of ſuch a bay is natural. This is the paſſage indicated by the Periplûs, ſix days in extent; and may perhaps have miſled the author, as well as others, who followed the ſame courſe.

In or near this bay, we are informed that there is a river which admits veſſels, and a ſmall port at the mouth of it called Oraia.

[11] Μετὰ δὲ τὴν Ὁμανιτικὴν χώραν ομοιως, ἡ παρ' ἰδὸν παράκειται [χώρα] βασιλεία; ἑτέρα;, καὶ κόλπος τῶν Τεραβδων λεγόμενος, ὃ κατὰ μέσον εἰς τὸν κόλπον παρανατείνει. Χωρα is either omitted or underſtood; and is, I believe, the nominative to παρανατείνει: but there is ſome corruption of the text, or ſomething not eaſily underſtood.

The capital of the diſtrict is inland, at the diſtance of ſeven days journey, where the king reſides. The country produces plenty of corn, wine, rice, and dates; but on the coaſt nothing except bdellium [14].

Theſe circumſtances happen to coincide with an account given to Lieut. Porter, when he was at Chewabad [15], on this coaſt; for a coaſt without produce he experienced, and the natives told him of a city ſeven days inland, large and walled: if therefore we knew where to fix the limits of our author's bay of Terabdi, we ſhould have ſomething to direct us to a poſition. The river ſeems like the Tanka Banca, or White River, of the charts; while Oraia bears a reſemblance to the Oritæ of Nearchus; but to theſe it is hardly related, as the journal certainly intimates a great extent of the coaſt between Oraia and the Indus; while the Oritæ of Nearchus are within fifty leagues of that river. We find no Oraia in Ptolemy; and if we are ſtill in Gadroſia, there is no place ſeven days inland which would anſwer to the Oraia of our author, but the Phoregh, or Poora, of Arrian. But on the whole of this, as we have ſo few data to guide us, it is ſafer to ſuſpend our judgment than to decide.

On the coaſt which follows, and which may be ſuppoſed to be the tract between Guadel and the Indus, the deſcription accords much better with the reality [16]; for we are told, that [17] there is a vaſt

[14] A gum. See Plin. xii. 9.

[15] Churbar. Lieut. Porter's Memoir, p. 8. in Mr. Dalrymple's Collection.

[16] This deſcription anſwers much better than that of Ptolemy, who has one line of coaſt from Alambateir, or Guadel, to the head of the Bay of Kutch.

[17] Μετὰ δὲ ταύτην τὴν χώραν, ἤδη τῆς ἠπείρου διὰ τὸ βάθος τῶν Κόλπων ἐκ τῆς ἀνατολῆς, ὑπερκειρώσης, ἐνδέχεται παραθαλάσσια μέρη τῆς Σκυθίας, παρ' αὐτὸν κείμενα τὸν βορέαν. This paſſage, ill conſtructed as it is, I truſt I have rendered faithfully: ὑπερκειρώσης, I imagine, expreſſes *encircling to a vaſt extent*; applied to an army, it means, out-*flanking the whole*: and ἐκ τῆς ἀνατολῆς may be ſaid of a bay, the head of which is to the *eaſt*, and

vaſt ſweep of the ſhore round the indenture of the bays, which have an inclination to the Eaſt; and, after paſſing theſe, a low tract of country towards the ſea, called Scythia, lies on the north of the courſe, and which extends to the river Sinthus.

Theſe bays are evidently meant for thoſe that are formed by the Capes Poſſem, Arraba, and Monze; and the bay immediately preceding Monze has a large ſweep, to which, with the aſſiſtance of imagination, we may give a direction to the Eaſt, as its inmoſt curve is ſomewhat to the eaſt of Cape Monze. It is added, that during the courſe from Monze to the Indus, the land is low, and lies to the north of the veſſel that is paſſing to the Eaſt. This tract is now called Scindi; and the Scythia of the Periplûs, wherever it occurs, is the actual Scindi[18] of the Oriental and modern geographers. Why the author writes Scythia, and why Ptolemy finds an Indo-Scythia in this country, has already been conjectured in the Voyage of Nearchus; where it was obſerved, on the authority of the Ayeen Acbari, that the country is divided between the Hendians and Sethians. I am myſelf perſuaded that this diſtinction is

and the opening to the weſt. But if we read ἠπείρᾳ ὑπερκειμένης ἐκ τῆς ἀνατολῆς, the ſenſe will not be very different, but the range of the coaſt more difficult to comprehend.

[18] The diſtinction in Al Edriſſi and the Oriental geographers, is Scind and Hind; that is, Scindi and Hindoſtan. Scindi comprehends the country on both ſides the Indus; and the Indus itſelf is written Scind or Sind, with an S, which is preſerved in the Sinthus of the Periplûs—in the Sindi and Sindocanda of Ptolemy. The Indus acquires another name while it continues a ſingle ſtream; for between Moultan and Tatta, it is called Mehran Mekran, and hence Kutch Mekran, the country on the coaſt weſt of the Mehran; and from Kutch Rennell derives Gadroſia. There is likewiſe another Oriental diſtinction, between Hind and Sin; in which Hind means Hindoſtan, and Sin, or Chin, Cochin China: Chin is alſo written Cheen; and Ma-Cheen, Great Cheen, means the country we now call China.—I ought not to diſmiſs this note without obſerving, that the Mehran of Ebn Haukel is the Chin-ab, or Akéſines: he is, in this, at variance with other Oriental writers; but his authority ſtands high.

original;

original; and that it is the cauſe of the error which has been adopted by Ptolemy, and other ancient geographers: but if this opinion is rejected, I ſhould then ſay, that Scythia is a corruption of Scynthia, and that Scynthia is as preciſely Scindi, as Sinthus is the Indus.

V. SCINDI, MINNÁGARA, BARBÁRIKÈ.

I SHALL collect the ſeveral particulars relating to Scindi, which lie diſperſed in other parts of the Journal, to this point; for it is natural to conclude, that from the time of Alexander, and the publication of the Voyage of Nearchus, the Greeks had always conſidered Pátala as the Port to which they were to direct their views, in order to obtain the precious commodities of the Eaſt. I have every where allowed that, while the maſs of the trade was confined between Egypt and Sabêa, ſingle ſhips, or individual merchants, might have reached India from the ports of the Red Sea. It is natural alſo to ſuppoſe, that the ſubjects of the Seleucidæ were directed by the ſame inducements, while the Syrian Monarchy was in its vigour,—while it poſſeſſed Suſiana, Perſis, Karmania, and the whole eaſtern ſide of the Gulph of Perſia, and before it was weakened by the revolt of Parthia, Bactria, and the country at the ſources of the Indus. The celebrated embaſſies likewiſe of the Syrian monarchs to Sandrocottus and Alitróchades, the ſovereigns of Hindoſtan, probably embraced objects of commerce as well as empire; for thoſe who found their way to the Ganges, could not be unacquainted with the profits to be derived from the commerce of the Indus.

The

The firſt [19] ſhip that coaſted round the peninſula of Arabia from the Red Sea, or that retraced the ſteps of Nearchus back again from the Gulph of Perſia, would naturally direct its courſe to Pátala and the Indus. Here it was known from hiſtory that the productions of the Eaſt were to be obtained; and here the trade, which paſſed in the earlieſt ages between all the countries at the ſources of the Indus and the coaſt of Malabar, muſt always have fixed its centre. As the Greeks and Romans increaſed their knowledge, and finally became acquainted with the monſoon, they made their paſſage to India direct; but the voyage to the Indus was not yet abandoned in the age of the Periplûs, nor probably for ſeveral ages later. Pátala our merchant does not mention, but there were evidently two marts of importance ſtill on this river: one, towards its iſſue, called Barbárikè; and another, ſomewhere in or near the Iſland of Behker, higher up, named Minnágara, which correſponded with the Sogdi, or Muſikanus, of the Macedonians, and which has been replaced by the Behker (Manſoura) or the Loheri of modern Scindi, or any one of the capitals occupied by different invaders in the various revolutions of this country.

Minnagar [20], or Minnágara, perhaps the Binágara of Ptolemy, is deſcribed as the capital of the country, and the reſidence of a ſovereign, whoſe [21] power extended in that age as far as Barugaza, or

[19] Large ſhips *from* the Indus, Patala, Perſis, and Karmania, came to Arabia as early as the time of Agatharchides, and moſt probably many ages prior, before there was any hiſtory to report the fact. I ſuppoſe theſe veſſels to have been chiefly navigated by Arabians, becauſe we can prove the ſettlement of that people on the coaſt of India from the time that hiſtory commences. See Periplûs ſupra, p 36.

[20] Minnagar is the fortreſs or city of Min, like Biſnagar, Tattanagar, &c.

[21] Maghmood the Ghaznevide, coming down the Indus, made his firſt inroads into Guzerat; and there ſeems to be a general connection between this province and Scindi, for the language is the ſame from Surat to Tatta, as we learn from Paolino, p. 262.

Guzerat.

Guzerat. The government was in the hands of a tribe of Parthians [22], divided into two parties; each party [23], as it prevailed, chose a king out of its own body, and drove out the king of the opposite faction. This sovereign, however, must have been of consequence, or the trade of his country very lucrative to the merchant, as appears by the presents necessary to ensure his protection. These were,

Βαρύτιμα ἀργυρώματα, - -	Plate of very great value.
Μυσικὰ [24], - - - -	Musical Instruments.
Παρθένοι ἐυειδεῖς πρὸς παλλακίαν,	Handsome Girls for the Haram.
Οἶνος διάφορος, - - -	The best Wine.
Ἱματισμὸς ἁπλοῦς πολυτελὴς, -	Plain Cloth, of high price.
Μύρον ἔξοχον, - - -	The finest Perfumes, or perfumed Unguents.

These articles are all expensive, and the best of their kind. The profits upon the trade must therefore have been great; but if Pliny's account be true, that every pound laid out in India produced an

[22] Βασιλεύεται δὲ ὑπὸ Πάρθων, συνεχῶς ἀλλήλους ἐκδιωκόντων. I should have been glad to have interpreted this passage as relating to the Parthian empire, which was then in its vigour, and might have extended itself eastward to the Indus; and, by applying ἀλλήλους to Hindoos and Parthians, the expulsion of each, alternately, from Minnagar, would have resembled the fate of Candahar in these latter ages. But it would then have been written ὑπὸ τῶν Πάρθων, *the Parthians, the Parthian empire*; and Πάρθων ἀλλήλους ἐκδιωκόντων must be, *Parthians driving out Parthians*.

[23] If the governing power were Parthians, the distance is very great for them to arrive at the Indus; may we not, by the assistance of imagination, suppose them to have been Aghwans, whose inroads into India have been frequent in all ages. That the government was not Hindoo is manifest; and any tribe from the West might be confounded with Parthians. If we suppose them to be Aghwans, this is a primary conquest of that nation, extending from the Indus to Guzerat, very similar to the invasions of Mahmood the Ghaznavide, and the present Abdollees or Durrannees. The Belootches, who have infested this country from the time of Alexander to the present hour, are a tribe of Aghwans: but the whole of this is suggested as a mere conjecture.

[24] Μυσικὰ in Greece would have a different sense; but I follow Hudson; I think he is correct, considering the country.

hundred

hundred at Rome, greater exactions than theſe might eaſily be ſupported.

The preciſe ſituation of Minnágara it is not eaſy to determine; but if it be the Minhavareh of Al Biruni [25], inſerted in De la Rochette's Map, I conclude it is alſo the Manhaberè of Al Edriſſi. Al Biruni was a native of the country, and conſequently his authority is great; and it is to be preſumed that De la Rochette follows him as a guide, in placing Minhavareh on the Indus, between the Iſland of the Behker and the Delta: Al Edriſſi places his Manhaberè at two ſtations, or ſixty miles, from Dabil; and Dabil, he adds, is three ſtations, or ninety miles, from the mouth of the Indus; that is, it is at the head of the Delta, and Manhaberè ſixty miles higher. But he adds, that it is towards the weſt, which cauſes ſome confuſion, unleſs he means by this that it is in the Iſland of Behker, which he extends likewiſe to the weſt. But if Al Biruni and Al Edriſſi can be reconciled, a Minhavareh, ſixty miles above the Delta, agrees perfectly with the Minnágara of the Periplûs, and ſufficiently with the Binnágara of Ptolemy; but not with *his* Minnágara, for that is in Guzerat, and he has another in the Bay of Bengal. D'Anville [26] ſuppoſes Minnágara to be the ſame as Manſoura, and Dabil to be at the mouth of the Indus, inſtead of being at the head of the Delta, where Al Edriſſi places it; but we approach ſo near a concluſion by means of the two Oriental geographers, that I think it may be depended on. The journal ſays, that the ſhips lay at Barbarikè, which was a port on the middle branch of the Indus, near the ſea, and facing a ſmall iſland; that Minnagar was beyond it inland; and that the whole cargo was carried up to that

[25] So called from the place of his reſidence, Al Birun, between Dubul and Manſura.—

[26] Abulfeda in Melch. Thevenot, vol. *i.* p. 9.
Antiq. de l'Inde, p. 34.

metropolis by the river. The repreſentative to ſupply the place of ſuch a capital would be the modern Loheri, at the ſouthern termination of the Iſle of Behker, which, a century ago, was a place of conſiderable commerce, and gave name to the two principal branches of the Indus, eaſt and weſt, as they divide to embrace the Delta: the eaſtern is ſtyled Bundar-Loheri, and the weſtern, Loheri-Bundar [27].

One circumſtance moſt remarkable is, that the port of Barbarikè is placed on the middle channel of the ſeven; and the other ſix are ſaid to be too ſhallow, or too marſhy, to be navigable. This is contrary to the report of Nearchus, and to our modern accounts; for Alexander navigated the two extreme [28] channels, eaſt and weſt; and they were both navigable within theſe fifty years. Whether the government of Minnagar cleared and opened the centre one, can only be conjectured; ſhips did not go up it, and what water was required for the boats that carried up their lading, depends on the nature of the veſſels which were employed. The Ritchel River, and that which iſſues at Scindi Bar, may either of them have been navigable in former times, or in different ages, according to the intereſt or ſituation of the different governments which may have prevailed. Rennell [29] ſtill ſpeaks of the Ritchel River as the largeſt; and without calculating whether it is preciſely the central iſſue of the ſeven, here Barbarikè might be placed, if other circumſtances ſhould be found

[27] Bundar Lori, the Eaſtern Channel, is called Nulla Sunkra in the treaty of Nadir Shah. See Nearchus, p. 529.

[28] The weſtern channel, which conducted to Lori-Bundar and Tatta, was the only one frequented by the Engliſh. This is now either impracticable, or rendered unſafe for ſtrangers by the government; for Tippoo Sultan's embaſſadors to the Abdollee Shah did not go up the Indus, but landed at Caranchy or Crotchey. See his Letters and Orders, in the Aſiatick Ann. Regiſter.

[29] Memoir, laſt ed. p. 180.

to

to correſpond. It is ſome proof of the fact, that Ptolemy has placed his Barbari in the Delta, convenient for the third and fourth channel; but his Barbari does not anſwer to the Barbárikè of the Periplûs; it is above his Patala, while the Barbárikè of the Periplûs is at the mouth of the channel, and cloſe to the ſea. It ought likewiſe to be obſerved, that this term is not the native name of a port, but a Greek epithet [30], implying, the Barbaric Port, the Barbaric Country, derived, if the conjecture may be allowed, from the merchants finding here thoſe articles which they had formerly purchaſed at Moſyllon, on the original Berber coaſt of Africa, where there is a Barbora to this day, and from whence many of the Oriental articles [31] in the market of Alexandria were called Barbarine and Barbarick.

The

[30] Ἐμπορίον Βαρβαρικόν, Χώρα Βαρβαρική. It is a moſt extraordinary circumſtance, which I am informed of by Mr. A. Hamilton, that Barbara has preciſely the ſame meaning in Sanſkreet, as it has in Greek, Latin, and Engliſh; all manifeſtly deducible from Egypt. A term of reproach ſynonimous with *ſavage*.

[31] I ſubmit the following conjecture to the natural hiſtorians, without any aſſertion of its truth, or ſufficient means of aſcertaining it:—Rhubarb is written Rha *Barbarum* and Rha *Ponticum*; and as the beſt rhubarb always came out of Eaſtern Tartary, the firſt courſe by which it would reach Greece would be by the Wolga, the Caſpian, and the Euxine. Now Rha is the native name of the Wolga; and Rha Ponticum would be the drug that came by the Rha, and Pontus, into Greece. But another conveyance of this drug would be out of Tartary to Cabul, and from Cabul down the Indus to Scindi, and to this port of Barbari, or Barbarikè. If then the name of the drug Rha was already received in Europe, would not the Rha procured in Scindi be called the Rha Barbarum?—I have not found this drug in Pliny, but ſuſpect it to be his Rhacoma, xxvii. 105. very dubiouſly deſcribed; and I know that Rha Ponticum, and Rha Barbarum, convey now ideas not conſonant to this explication; but ſtill it may be the true one, originally: the ground for the adoption of this opinion is derived from Salmaſius. Bayer obſerves, that Rha ſignifies a river in the language of the natives. Hiſt. Bact. p. 163. from Scaliger, Doct. Temporum. That Rha the plant, derived its name from Rha the river, we have certain information in Ammianus Marcellinus: Huic, Rha vicinus eſt amnis in cujus ſuperciliis *ejuſdem nominis*, gignitur radix proficiens ad uſus multiplices medelarum. Am. Mar. p. 390; and, becauſe this root was brought out of the Euxine, he confounds the Rha with the Don, and ſuppoſes it near the Palus Mœotis. The rhubarb brought into

The articles imported at Barbarikè are,

Ἱματισμὸς ἁπλῆς ἱκανὸς,	-	Clothing, plain, and in conſiderable quantity.
Ἱματισμὸς νόθος ἐ πολὺς,	-	Clothing, mixed.
Πολύμιτα [32], - -	-	Cloth, larger in the warp than the woof.
Χρυσόλιθον, - -	-	Topazes.
Κοράλλιον [33], - -	-	Coral.
Στύραξ, - - -	-	Storax.
Λίβανος, - - -	-	Frankincenſe.
Ὑαλᾶ σκεύη, - -	-	Glaſs veſſels.
Αργυρώματα, - -	-	Plate.
Χρῆμα, - - -	-	Specie.
Οἶνος ἐ πολύς, - -	-	Wine.

The Exports are,

Κόστος, - - -	-	Coſtus. A ſpice.
Βδέλλα, - - -	-	Bdellium. A gum.
Λύκιον, - - -	-	Yellow dye.
Νάρδος, - - -	-	Spikenard.
Λίθος καλλαϊνὸς, - -	-	Emeralds, or green ſtones.
Σάπφειρος, - - -	-	Sapphires.
Σηρικὰ [34] δέρματα, -	-	Hides from China.
Ὀθόνιον, - - -	-	Cottons.

India in modern times, came by the caravan which paſſed between Cabùl and Caſhgar, three months journey from a mart called Yar Chaun, but ultimately from China. See Finch in Purchas, vol. ii. p. 434.

[32] Veſtis Polymitos. *Veſtis* filis verſicoloribus contexta. But dubious.

[33] At Calicut they took gold and ſilver alone, or elſe *coral*, when the Portugueſe came there firſt. Cada Moſto, p. 58. Grynæus.

[34] This is very dubious, and occurs no where elſe.

Νῆμα

Νῆμα Σηρικὸν, - - - Silk Thread.
Ἰνδικὸν μέλαν, - - - Indigo, or Indian ink?

Such are the different articles of export and import; and the author obſerves, that in order to reach this port in the proper ſeaſon, the ſhips ſhould leave the harbour of Bereníkè in Epiphi, or July; adding, that the paſſage down the Red Sea is difficult at ſo early a period, but that a favourable wind (that is, the monſoon) is more eaſily obtained after you have paſſed the ſtraits, and the voyage more expeditious[35]. This is in harmony with the account of Pliny, who informs us, that the paſſage down the gulph took up thirty days; a long time for a paſſage ſhort of five hundred miles, and which proves, not only the difficulty of the navigation, but the unſkilfulneſs of the navigators. Upon approaching the mouths of the Indus, the ſea is white; and the ſign of land before it is ſeen, is a multitude of ſnakes, called Graai, floating on the ſurface. This circumſtance, which ſeemed fabulous to the ancients, and ſome of the moderns, is now known to be a fact that takes place down the whole coaſt of Malabar, as well as on the approach to the Indus: it is imputed to the rains of the monſoon waſhing down theſe animals[36] out of the rivers. I ſhall here alſo take occaſion to do juſtice to Agatharchides, for condemning his report of a whiteneſs in the ſea off the coaſt of Arabia. I am not apt to ſuppoſe every extraordinary report falſe, in authors ancient or modern; and I have pleaſure in acknowledging the veracity of Agatharchides in this inſtance, on the authority of Corſali[37], Thornton, and Terry; Corſali's account,

[35] Δυσπλόος μὲν, ἐπιφορώτατος δὲ . . . . καὶ συντομώτερος ὁ πλοῦς. Ἐπίφορος is particularly applied to winds: ventus ſecundus. Ἐκείνων, in this paſſage, I have omitted, and cannot render.

[36] Paolino.

[37] "You have twenty leagues of white ſea "between Socotra and Arabia." Dalrymple's Collection, p. 57. "The ſea near Socotra "is

account, indeed, goes rather to confirm the Periplûs; but the evidence of Thornton and Terry is direct, "that the ſea near Socotra "is as white as milk." We are every day leſſening the bulk of the marvellous imputed to the ancients; and as our knowledge of the Eaſt increaſes, it is poſſible that the imputation will be altogether removed.

From the whole of the particulars collected at the Indus, there is every reaſon to believe that the writer of the Periplûs was here in perſon: the minute circumſtances recorded form a ſtrong contraſt with the ſlight notice of the Gulph of Perſia and the Coaſt of Gadroſia; and the more circumſtantial detail reſpecting Guzerat and Cambay, which we are now approaching, is ſo very remarkable, that the deſcription could hardly have occurred, unleſs it were derived from information on the ſpot.

VI. CUTCH, GUZERAT, BARUGAZA.

THE firſt place we are directed to on leaving the Indus, is the Bay of Cutch or Kartſch, the Kanthi [38] of Ptolemy, the Eírinon of the Periplûs: it is ſaid to be unexplored [39]; a circumſtance appropriate to it at the preſent hour; and to have two diviſions, the

"is as white as milk." Terry in Purchas, vol. iii. p. 1467.

Vicino al India trecento miglia, l'acque del mare ſi moſtran come di latte che mi pare eſſer cauſato d' al fondo, per eſſervi l' arena bianca. Andrea Corſali. Ramuſio, tom. i. p. 178.

See Periplûs, p. 36. and Agatharchides in Hudſon, p. 64.

[38] Cantha is one of the names of Criſna, as *Huſband* or *Lord*. There are ſtill great remains of Hindoo ſuperſtition in this part of India: a pagoda in Kutſen, another at Jaigat, and a third at Sumnaut—all ſtill conſpicuous; and Sumnaut and Jaigat ſtill viſited in pilgrimage. Mr. A. Hamilton.

[39] Ἀθηρητος; but an Engliſh officer, taken priſoner by the pirates, was carried up it, according to Rennell. The pirates ſhould be thoſe of Goomtee, juſt to the eaſt of Jaigat.

greater

greater and the leſs, both ſhoal, with violent and continual eddies extending far out from the ſhore; ſo that veſſels are often aground before they ſee land, or are hurried away by the eddies and loſt. The ſhore begins to curve as ſoon as you leave the Indus[40]; firſt towards the eaſt, next in a ſoutherly direction, and, finally, back again to the weſt; till it reaches the promontory Barákes, which ſhuts in ſeven iſlands with its projection. This cape repreſents, with ſufficient exactneſs, the Jaigat point of our charts, and its iſlands within, which are at this day the retreat of a piratical tribe, viſited by the Engliſh within theſe few years[41].

If a veſſel approaches this point, her only chance to eſcape, is an immediate alteration of her courſe; for if ſhe is once well within it, it is certain deſtruction. The ſea rolls in here, a large and heavy ſwell, with great violence, forming eddies and whirlpools in every direction. The ſoundings likewiſe vary from deep to ſhoal, or rocky, without warning; ſo that if you attempt to anchor, the cables are cut or rubbed by the foulneſs of the bottom. But the ſign of approaching this bay, is another ſpecies of ſerpents, floating on the water, larger, and of a black colour; while thoſe that are met with at Barugaza, and lower down, are green, with a golden hue, and of a ſmaller ſize.

From Barákès, and the Bay of Eírinon, the next in ſucceſſion is the Bay of Barugáza, which terminates [ſouth-weſt] on the boun-

[40] Ἀπὸ τοῦ ὅρμου, the laſt ſtation is Barbarikè. The text ſeems to give the name of Barákes to the coaſt as well as the cape. D'Anville finds here a tract called Barſeti, the Barafit of Al Biruni, p. 83,

[41] In 1799. See Indian Reg. 1800, Chronicle, p. 3. The diſtrict is called Goomtee: the pirates are ſaid to have been driven from Kutſch, between the Indus and the head of the gulph, and to have ſettled on the oppoſite ſhore of Guzerat, ſince called Little Kutſch. They are the Sanganians of our early navigators, the Sangadæ of Nearchus.

dary

dary of Aríakè [42], the territory of Mámbarus, who is ſovereign alſo of all India [43]. Inland, on the north, the diſtrict of Barugáza joins to Scindi, and is ſubject to the Parthians of Minnagar; and the ſea-coaſt, from Scindi towards Guzerat, is called Suraſtrênè. It produces abundance of corn, rice, oil of ſeſamum, ghee, and cotton for ordinary manufacture; and the cottons of Minnagar are carried to Barugáza for exportation. The natives are black, and men of large ſtature, and the herds of cattle in the country are numerous. Suraſtrênè [44] muſt therefore be the Kutſch of our modern charts, the capital of which is Boogebooge; a tract wholly inhoſpitable, and now never viſited; ſo that we have no opportunity of knowing [45] whether it anſwers to the account of the Periplûs or not.

The paſſage from Barbarikè to Barugaza is [not made along ſhore by the Bay of Eírinon and Barákes, but] ſtrait acroſs to the headland of Papíka [46], which lies oppoſite to the harbour of Barugáza, and in the neighbourhood of Aſtra Kampra and Trápera. This

[42] Ἡ πρὸς τῆς Ἀριακῆς χώρας τῆς Μαμβάρου βασιλείας ἀρχή, καὶ τῆς ὅλης Ἰνδικῆς ὅσα. The beginning of Aríakè, marks the diſtinction; for Barugaza was ſubject to Minnágara. Ἀριακῆς for Ἀραβικῆς, is the undoubted correction of Stuckius. Suraſtrene; Mr. Hamilton interprets it Sri-raſtra, the *Lord of Proſperity*. Jaggat, *the World*.

[43] *All India* is a large expreſſion; but it cannot comprehend more than the northern part of the peninſula of India, in oppoſition to Scindi and Guzerat, in that age, under the Parthians. Such a king as the Balahara of Al Edriſſi (p 62.) would correſpond ſufficiently; for Balahara ſignifies *King of Kings*, according to his interpretation; but Mr. A. Hamilton ſays it implies, the *Overthrower of Armies*.

[44] Suraſtrênè is not ſo abſolutely confined in the text to Kutſch, that it may not extend to the coaſt of Guzerat alſo; but in allotting it to Kutſch only, we unite the account in the Periplûs with the geography of Ptolemy; and the text itſelf is ſo corrupt that we are utterly at a loſs; for it ſays, the inland part of Scynthia touches on Iberia. Iberia is certainly a falſe reading, but what ought to be ſubſtituted for it is dubious: Hudſon, or Stuckius, read Σαβειρία, from Ptolemy; and Ptolemy has Παταλήνη, καὶ ἡ ὑπερκειμένη αὐτῆς Σαβειρία, p. 172.

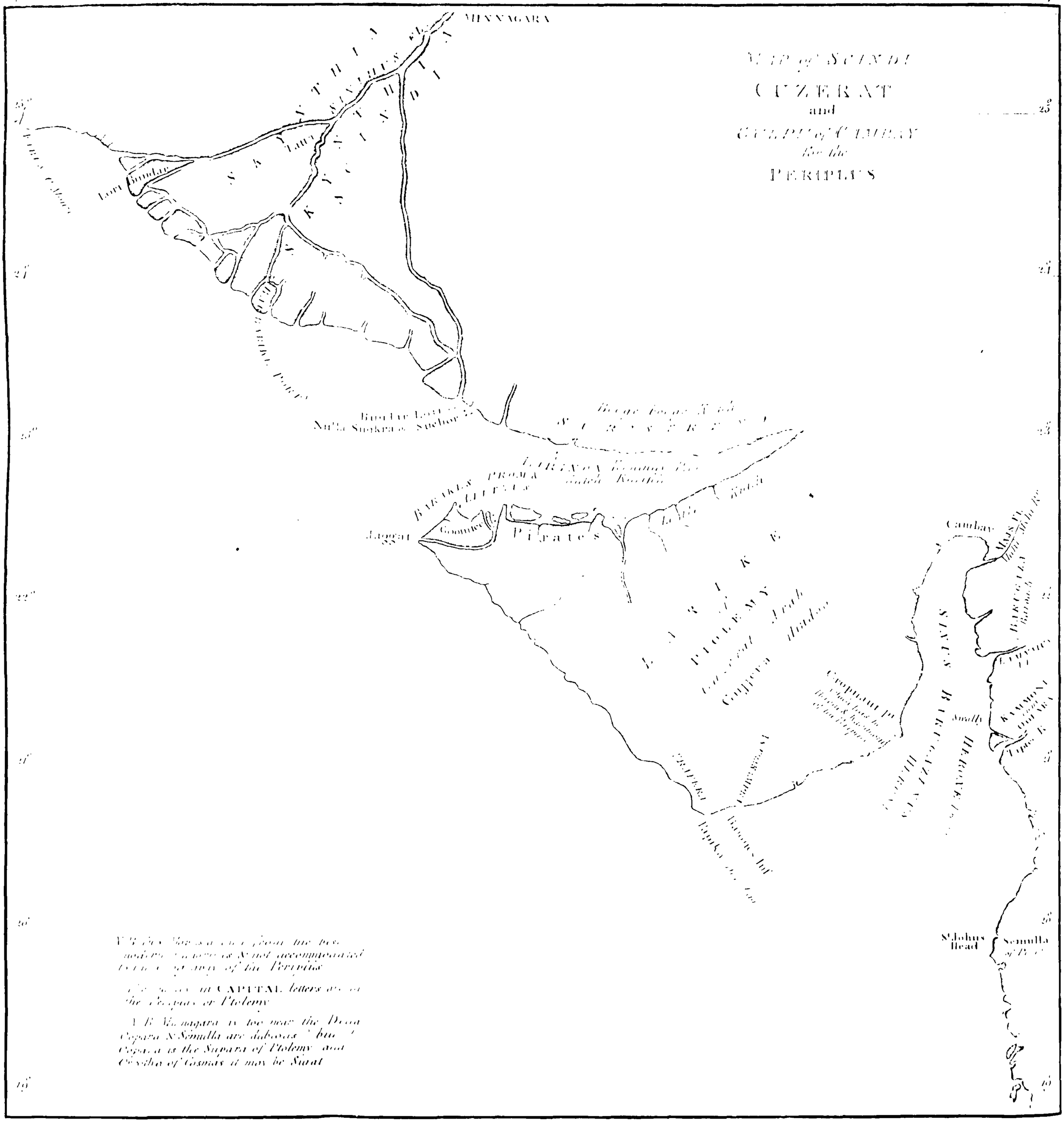
[45] Orme ſays, it furniſhes a good breed of horſes, which implies paſture for other cattle alſo. Hiſt. Fragments, notes, p. 107.

[46] D'Anville finds here a Soto Papera, for Aſto Papika; but upon what authority he does not mention. Antiq. del Inde, p. 83.

cape

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MAP of SCINDE
CUTCH
GUZERAT
and
COAST of CANDEISH
for the
PERIPLUS


MINNAGARA
SYTHIA
SINDHUS EL.
SYTHIA
Tatta
Indus R.
Barbarike
Barbarike Pr.
Indus Boucha
Indus Pr.
Barbarike Pr.
Barbarike Gulf
Barbarike Pr.
Barbarike Gulf
Barbarike Pr.
Barbarike Gulf

cape forms the weſtern point of the Bay of Barugáza, at the extremity of which lies the Iſland of Baiônès [47]; and from this point the coaſt runs northerly till it reaches the head of the gulph; there it receives the river [48] Mais [and then returns again ſouth to Barugáza itſelf, and proceeds, in the ſame direction, to the main coaſt of the peninſula.] It is added, that the paſſage from Scynthia to Baiônès is three thouſand ſtadia, which agrees ſufficiently with the actual diſtance of about three hundred miles.

Among all theſe particulars, there is not a ſingle circumſtance which does not accord [49] with the actual nature of the voyage at the preſent day, from Scindi Bar to Diu Head; for Baiônès [50] is Diu [51]; and from Diu, the coaſt runs N.E. to the head of the Gulph of Cambay, where we find the River Mahi, as the repreſentative of Mais. From Mahi the direction of the ſhore is ſouth to Baroache, the Barugáza [52] of the journal on the Nerbudda, which the Periplûs calls the Lamnaius, and Ptolemy the Namádus [53], ſtill written Narmada in ſome of the Hindoo books. The other part of the account, which at firſt ſeems to intimate that the bay is thirty miles acroſs,

[47] Baiônès is Diu; and, if I underſtand it rightly, this iſland, and the coaſt towards Jaigat, is the Cheſmaerran of Marco Polo: in his time, all the trade here was in the hands of Arabs.

[48] Ἐν δὲ τοῖς ἐσωτάτοις τόποις μέγιστος ποταμὸς ὁ λεγόμενος Μάϊς.

[49] On peut dire ainſi, que ce qu'on acquiert de notions par le Périple, eſt ſatisfaiſant et poſitif. D'Anville, Antiq. de l'Inde, p. 86.

[50] I conjecture that Diu is the Avi Caman of Al Edriſſi, becauſe he reckons one day and a half's ſail from Cambay to Avi Caman, and two from Avi Caman to the Indus. They are courſes far too long for an Indian ſhip, but the central point ſeems relative. He ſpeaks magnificently of the trade of Cambay in his time; and extenſive it continued, till the greater proximity of Surat to the open ſea attracted the trade to that port.

[51] Diu is *Dive*, *the* Iſle. Diu Head is Papika, the cape immediately weſt of Diu.

[52] Barugáza ſignifies the *Water of Wealth*, from Bari, *water*, and Gaza, *wealth*, *riches*, *treaſure*, or treaſury; the ſame in Sanſkreet as in Perſic. Mr. A. Hamilton.

[53] Aſiatick Reſearches. Is it not Nahr-Bhudda? or Nahr Mahadeo? The Soane, its kindred ſtream, is called Soane-Budda.

will perhaps bear a more favourable conſtruction, which I ſubmit to the judgment of the reader: [" Upon arriving] at this [54] gulph, " thoſe who are bound to Barugáza [keep clear of the land on " either ſide] and paſs up the open channel for thirty miles, leaving " Baiônès on the left, till it is ſcarcely viſible in the horizon, [their " courſe is] then eaſt to the very mouth of the river that leads " to Barugáza."

The paſſage into this gulph is narrow, and difficult of acceſs when you approach it from the ſea, leaſt you ſhould be carried away to the right hand or the left. The left ſide is the beſt; for on the right there lies a ſtripe of ſhoal, rough and broken, called Herônè, near the village of Kammôni [55]; and this ſhoal of Herônè, notwithſtanding the ſhifting to which ſands are liable, is not undiſcoverable at the preſent day, or at leaſt a repreſentative for it, which will ſufficiently elucidate the account in the journal. The charts and maps are full of ſhoals; De la Rochette has one extending from Swally to below Daman, and others without it; and a particular one off Groapnought Point, which ſeems to be the Jamteir Shoal of Skinner, correſponding with the ſituation required: all of them are long, narrow ſtripes, like the Fillet [ταινία] of the Periplus, cauſed

[54] [Κατα] Τοῦτον τὸν Κόλπον, τὸ πέλαγος ὡς σταδίων τριακοσίων οἱ πλέοντες εἰς Βαρύγαζαν διαπερῶνται· ἐξ εὐωνύμων ἀκροφανῆ καταλιπόντες τὴν νῆσον, καὶ εἰς αὐτὴν ἀνατολὴν, ἐπ' αὐτὸ τὸ στόμα τοῦ ποταμοῦ, Βαρυγάζων. Κατὰ muſt be underſtood either with τὸν κόλπον, or τὸ πέλαγος: I prefer the firſt, as uſual in the journal. Τὸ πέλαγος I render *clear channel*, as *open ſea*, in compariſon of a courſe along either ſhore; ἀκροφανῆ is, ſcarcely appearing, ſcarcely viſible; διαπερῶνται need not be taken in the ſtrict ſenſe of *croſſing*, but may ſignify *paſſing through the ſea*, for 30 miles up the channel.

[55] Kammôni is ſufficiently marked here on the ſide of the Gulph of Cambay, oppoſite to Diu, to ſhew that it cannot be far from the poſition of Surat, or at leaſt muſt be ſouth of Barugáza; and ſo Ptolemy places Kamanes in his moſt diſtorted map of this coaſt; and yet Major Rennell ſays, Cambay appears to be the Camanes of Ptolemy. Memoir, laſt edit. p. 210.

apparently

apparently by the rapidity of the tide, which throws up the ſand, but will not permit it to accumulate in breadth. On the left, oppoſite to Kammôni, near the promontory of Aſta Kampra, lies the cape called Pápika [56]: here it is difficult to anchor, both on account of the current, and becauſe the cables are cut by the foulneſs of the bottom. But even when the paſſage into the gulph is ſecured, the mouth of the Barugáza River is not eaſy to hit; for the coaſt is low, and there are no certain marks to be ſeen: neither, if it is diſcovered, is it eaſy to enter, from the ſhoals [57] which are at the mouth. For this reaſon pilots are appointed by government, with attendants in large boats, called Trappaga and Kotumba; theſe veſſels advance as far as Suraſtrênè, or Kutſch, and wait there to pilot the trade up to Barugáza. Their firſt ſervice, at the entrance of the gulph, is to bring round the ſhip's head, and keep her clear of the ſhoals: this they do by means of the many hands they have on board, and by taking the veſſel in tow from ſtation to ſtation, which ſtations are all known and marked, they move with the beginning of the tide, and anchor as ſoon as it is ſpent at certain berths that are called Baſons [58]; and theſe baſons ſtill retain water after the tide is out, all the way to Barugáza. The town itſelf lies thirty miles up the river; which fact directs us to Baroache, without a poſſibility of miſtake.

The difficulty of navigating this bay affords a ſufficient reaſon why Barugáza ſhould be more flouriſhing than Cambay, and Surat

[56] Pápika, *criminal*, *guilty*, barbarous. Mr. A. Hamilton.

[57] It was very late that I ſaw Skinner's Chart, by favour of Mr. Arrowſmith. His Memoir I have not ſeen; but I am perſuaded, it would explain many particulars here mentioned.

[58] Κυθρῖνοι, literally, kettles; from κύθρα, obſolete; χυτρῖνοι, Haſych. Salm. 83.

preferable to Barugáza or Baroache; and yet Cambay was a great place of trade when Tavernier was in India. Mr. Hamilton adds, that the people of Cambay were formerly hetorodox, or Bhuddists; and that Aríakè, which corresponds with Kemkem, or Concan, is the Country of *Believers*, probably in contrast to the inhabitants of Cambay. How wonderfully does this accord with the rise and success of Sevagee, and the Mahrattas, the restorers of Braminism in India, and the conquerors of the Mahomedan powers? The native superstition would naturally survive in the mountainous regions of the peninsula, while the Mahomedans overran the plains of Hindostan; and if Aríakè does signify the Country of Believers, it is a proof that this part of the peninsula was, in the earliest ages, celebrated for its attachment to Braminism. The Mahratta chiefs are many of them Bramins; but when in power, we find nothing of that meek spirit of the Hindoos so much vaunted in Europe: they have dethroned their sovereigns; they are the most cruel ravagers and invaders; equally greedy of desolation as plunder; they have destroyed much, and restore nothing: in short, they have made it a question, whether the whole people were not happier under the government of the Mahomedans, than their own. The house of Timour was a mild dynasty; Aurengzebe, indeed, was a tyrant, a persecutor, and a hypocrite; but Acbar was the father of his country. But to return,

The circumstance of the tides is not peculiar to this place, though they are more violent here than elsewhere; for almost all the rivers of India are large, and have both the flux and reflux of extraordinary strength, conforming with the moon, new and full, as well as for three days after each, and falling off again in the intermediate space;

ſpace; but at Barugáza this violence is more remarkable, ſo that without warning you ſee the bottom laid bare, and the ſides next the coaſt, where veſſels were ſailing but juſt before, leſt dry as it were in an inſtant; again, upon the acceſs of the flood-tide, the whole body of the ſea is driven in with ſuch violence, that the ſtream is impelled upwards for a great number of miles, with a force that is irreſiſtible. This makes the navigation very unſafe for thoſe that are unacquainted with the gulph, or enter it for the firſt time. No anchors are a ſecurity; for when the vehemence of the tide commences, there is no intermiſſion, no retreat: large veſſels caught in it are hurried away by the impetuoſity [59] of the current, and thrown on their ſides, or wrecked upon the ſhoals; while the ſmaller ones are completely overſet [60]. Many alſo that have taken refuge in the creeks, unleſs they have fortunately changed [61] their place in due time, (which it is very difficult to do, on account of the inſtantaneous fall of the water,) upon the return of the tide are filled with the very firſt head of the flood, and ſunk. But all theſe circumſtances united concur more eſpecially, if the new [62] moon falls in conjunction with the night tide; for then, if you have been prepared to enter upon the firſt of the flood, and when the ſea appeared perfectly calm, you ſhall hear, in a moment, a ruſhing ſound like the tumult of battle,

[59] Τῇ Ἰνδίχ is a corruption for which nothing occurs. Perhaps προληφθεῖσα τῇ Βίχ?

[60] So the Oriental Navigator ſays, "Near Dagom the tide runs ſo rapidly, that if the veſſel ſhould take the ground ſhe muſt overſet immediately, and in all probability every ſoul on board periſh, which often happens through the neglect or obſtinacy of the pilots. P. 207. Another part, near Gogo, is deſcribed as very dangerous, and environed with rocks and ſhoals; and he notices that the tide runs ſix miles an hour. P. 206.

[61] Ὅτ ἂν μὴ διρίσῃ. Dodwell reads διρέσῃ, rowed off, rowed through; which I follow.

[62] Συμμηνίας, the moon in conjunction with the tide. But συμμηνίας does not occur in the lexicons: may it not be νεμηνίας? Hudſon renders it interluniis, which has little to do with high tides.

and

and the water driving forward with the utmoſt impetuoſity, covers the whole of the bare ſhoals in an inſtant.

It will immediately appear, that this deſcription relates to that ſort of tide which is called the Bore [63], and is common to many places in Europe as well as India. On the coaſt of Egypt, or in the Red Sea, the author could have ſeen nothing that reſembled it, and he dwells upon it, therefore, with more minuteneſs than a modern obſerver would employ; but from this very cauſe it is that we have a picture which cannot deceive us, and a conviction that the author relates what he had himſelf experienced.

We come next to the enumeration of the countries with which Barugáza is connected, and its relative ſituation with regard to the provinces that ſurround it. Among theſe, on the north-weſt, lie the Aratrii, Rachooſi [64], and Tantháragi, names with which we are totally unacquainted, as they do not occur in any other author; but that they lie towards the north-weſt, between Guzerat and Multan is manifeſt from the ſucceeding diſtrict of Proklaïs, which comprizes the city of Bookephalos, for that we know to be in the Panjeab. He then adds, that beyond Proklaïs, ſtill farther to the north-weſt, lies the province of Bactria, governed by its own [65] kings. Here we may obſerve, that the country between Guzerat and the Indus is to this day leſs known than any other part of India: it is a ſandy

[63] See the deſcription of the Bore, called Macareo, in Pegu, by Cæſar Frederick. He mentions ſtations in that river like theſe; and adds, that the Macareo in Cambay is nothing equal to that of Pegu. Hackluit, ii. p. 234.

[64] The Rachooſi are the giants of India, as I learn from Mr. A. Hamilton, of Edinbro'.

[65] Bayer's catalogue of Bactrian kings ends 134 years before our era, and therefore he has no king for the age of the Periplûs. For ὑπὸ βασιλία ἴσαν ἴδιον τόπον, he propoſes to read ὑπὸ βασιλεῦσιν ἰδίοις ὄντων. And ſome correction is wanting; for ἴσαν neither agrees with ἔθνος or τόπον. May not the merchant of Periplûs have heard of a Bactrian dynaſty, and aſſigned it to his own age after it was extinct? Bayer imputes the age of the Periplûs to Aurelius Antoninus. Hiſt. Bact. p. 98.

deſert,

desert, affording refuge to tribes of Rajpouts, Hendouans, and Ashambetis, called Jams, who are all without fixed habitations, and plunderers like the Arabs. These may correspond[66] with the hordes mentioned by the author; but from Minnagar upwards, to the Panjeab and to Bactria, we can follow him with more precision; for in these parts, he says, there still remain memorials[67] of Alexander and his conquests on the Indus; such as altars, the entrenchments of his camps, and very large wells. The last particular seems evidently to refer to the wells which Alexander opened in his three days march to the East from the eastern branch of the Indus: they were on the route to Guzerat; and the route between the Indus and that province is kept open, at this day, only by wells of this description in the desert. But we are told afterwards, that Alexander marched eastward from these countries to the Ganges[68], neglecting Limúrikè, and the whole peninsula on the south. This only proves that our author was a much better merchant than an historian; but he redeems his error by the preservation of a circumstance which fell under his own observation; which is, that coins with the Greek inscriptions of Menander and Apollódotus, who reigned in this country after Alexander, were still current in Barugáza.

[66] Hudson wishes to convert Aratrii into Arii, and Rakhoosi into Arachosii. So far as Aria and Arachosia are connected with Bactria, there is reason in this; but if there is any order observed in arranging these tribes, they ascend with the Indus to Moultan and the Panje-ab, and thence with a north-westerly direction to Bactria.

[67] Ἱερά ἀρχαῖα. Sacella, Hudson.

[68] It will be readily allowed, that an author who could fall into this error, might be mistaken in regard to the kings of Bactria.

VII. KINGDOM OF BACTRIA, TÁGARA, PLÍTHANA, OZÊNÈ, DEKAN.

This Apollódotus is hard to diſcover, even by the ſcrutinizing accuracy of the learned Bayer; but Menander he has introduced into the catalogue of his Bactrian kings, and with a moſt peculiar diſtinction, that he had extended his ſovereignty down the Indus, and over the Delta of the Patalene [69]. This extraordinary influence of the Greeks, in theſe diſtant regions, is no more to be wondered at, than the erection of kingdoms by the deſcendants of officers of Ginghiz Khan, Timour, or Nadir Shah: the heads of a conquering army are all as ready to divide an empire, as the ſucceſſors of Alexander; and the officers of theſe ſucceſſors, as eager to revolt from their principals, as the principals from the family of the conqueror; thus roſe the kingdom of Bactria, by the revolt of Theódotus from the monarch of Syria, which maintained itſelf for near an hundred and twenty years, and conſiſted at one time of a thouſand cities: ſimilar to this, perhaps, was the ſovereignty of Apollódotus, who ſeems to have had ſome provinces towards the ſources of the Indus, which, in the obſcurity of the Syrian hiſtory, cannot now be aſcertained, and the memorial of which is preſerved almoſt excluſively in the Periplûs.

That the coins [70] of theſe princes ſhould paſs current at Barugáza,

[69] See Strabo, p. 471. Bayer, Hiſt. Bactrian, p. 80.

[70] Paolino informs us, that P. Pavoni, a miſſionary in Myſore, found a coin of Claudius in the river Caveri. P. 98. Renaudot's Arab, p. 15. mentions a Thatarian drachm, which weighs half a dram more than the Arabian drachm. But this is not a foreign, but a domeſtic coin; it bears the die of the prince.

is no more uncommon[71] than that the Venetian ſequin[72], and Imperial dollar, ſhould be at this day current in Arabia, or that the Spaniſh piaſtre ſhould paſs in every port of India and the Eaſt; that is, round the world from Mexico to Manila, and in ſome inſtances, perhaps, from Manila to Mexico again. A fact ſtill more worthy of notice is not to be omitted, as it is an obſervation appropriate to a merchant[73]; which is, that the denarius, either gold or ſilver, was exchanged with advantage againſt the ſpecie of the country. This is in correſpondence with the teſtimony of Coſmas, almoſt five hundred years later; who takes occaſion, at Ceylon, to mention, that the Roman money was received, and trade carried on by means of it, to the utmoſt extremity of the world, no nation having a [ſtandard of] coin pure enough to compare with the Roman. And it is a truth (as I learn from Clark on Coins), that the Byzantine ſtandard was not only the pureſt, but moſt permanent, of any in the world.

Before we can proceed to the commerce of Barugáza, we have other relative ſituations to conſider, as Ozênè on the Eaſt, and Plíthana, and Tágara, on the ſouth-eaſt. Theſe Lieut. Wilford has concluded to be Ougein, Pultanah, and Deoghir. There is every reaſon to adopt his concluſions; and if, after the ſeveral circum-

[71] Niebuhr ſays, vol. i. p. 137. that Greek, Perſian, and Roman coins are ſtill current in Curdiſtan; and Nicolas di Conti Ramuſio, tom. ii. p. 286. mentions the Venetian ducat as current in India in 1440, that is almoſt 60 years before the Portugueſe reached India.

[72] On the coaſt of Malabar, women appear at this day ornamented with ſequins, coins of Portugal, and Engliſh guineas, by way of necklace. Moore's Narrative, p. 293.

[73] I do not wiſh to deprive either Bayer, or Robertſon, or Maurice, of the honour of theſe obſervations, previous to the preſent publication; but they could not be omitted here, as forming part of my plan; and I had obtained my information previous to conſulting any of their works. An author, in the legal phraſe, *takes nothing* by ſuch an aſſertion; he deſerves nothing but what the reader pleaſes to allow him. See Bayer, Hiſt. Bact. p. 108.

ſtances already enumerated, we have cauſe to think highly of the information of our author, we ſhall be diſpoſed, after tracing theſe ſeveral connections, to allow that there is no ſpecimen of ancient geography ſo completely ſatisfactory, or ſo conſonant to truth, as the portion now under contemplation.

Towards the eaſt of Barugáza lies Ozênè, which was formerly the capital of the country. What are we to underſtand by this, but that the Parthians, who were now maſters of Minnagar, and poſſeſſed of Guzerat, had driven the native Hindoos out of power, and ſeized upon the government of theſe provinces themſelves? And what do we ſee in this, but the prototype of the Mahomedan uſurpations, which have been too faithfully copied by European powers? and whoſe place we now occupy as maſters of Surat, Baroache, and Cambay, at the preſent hour. When the Europeans firſt reached India, Surat was the principal ſeat of commerce on the north, as Calicut was on the ſouth; and the merchants of Guzerat were the richeſt and moſt active traders in India. Surat is not more than forty or fifty miles from Baroache, and Baroache [74] is the Barugáza of the Periplûs. In the age of that work, the merchants of this country were not leſs vigorouſly engaged in their purſuits: they traded to Arabia for gums and incenſe, to the coaſt of Africa for gold, and probably to Malabar and Ceylon for pepper and cinnamon. If I could find any thing in hiſtory to countenance the idea of the Hindoos [75] being ſeamen [76] in any age, I ſhould place them

[74] Al Edriſſi calls it Berug, and Beruts; the Engliſh now call it Broche. Strabo writes Bargoſa. D'Anville, Geo. Anc. p. 88. But this is dubious; for the Bargooſi of the Periplûs are on the other ſide of the peninſula.

[75] Quello che bee vino non ſi receve per teſtimonio, ne quello che naviga per mare perche dicono che chi naviga per mare è deſperato. Marco Polo, lib. iii. c. 20. p. 54.—This relates to the Hindoos of Coromandel.

[76] Sir William Jones has ſuppoſed, that, from Bottomry being mentioned in the laws of

them in this province. But as Barthema informs us, that in his time the Hindoos at Calicut [77] left all navigation to the Mahomedans, ſo it ſhould ſeem that the prohibitions of their religion had been uniform from all ages. Pliny ſpeaks as ſtrongly of the Arabs on the coaſt of Ceylon; and Arabs [78] there muſt have been at Barugáza for the ſame purpoſe, unleſs it ſhould be diſcovered that there was ſome caſt, of a degraded ſort, that ſupplied their place. Fiſhermen there are, but they can cook and eat their food on ſhore; and even fiſhermen are an abomination in Malabar. Merchants, however, may grow rich at home, while other nations are their carriers; and that the greateſt trade of India was in that age fixed in Guzerat, is evident, not only from the enumeration of articles at this port, but from the general importance it bears in the mind of the author, and the circumſtantial detail of all that is connected with it.

The connection with Ougein [79], and the mention that this place was once the ſeat of government, is in perfect conformity with

of Menu, the Hindoos muſt have been navigators in the age of that work. Now, that ſhips of Hindoos went to ſea, and that a proportionate intereſt for the hazard of the ſea was to be paid on money borrowed, muſt be true; but it remains to be proved that the ſeamen were Hindoos. And his endeavour to prove that they uſed the ſea in former ages, proves that it is contrary to their principles and practice in later times. It is only within theſe very few years that the Engliſh have been able to carry their ſepoys by ſea; and in doing this, there ſeems to have been employed money, diſcipline, and a variety of fictions to ſalve their conſcience.

[77] In urbe Calecahut qui Idola colunt [Hindoos] non fulcant maria, id munus Mahumetanis delegatur. Quorum numerus in ea civitate ſola excedunt quindecim millia. Barthema apud Grynæum, p. 112. And in Orme's account of the fleets near Bombay, one party were Siddees, or Abyſſinians, and the other Arabs chiefly. Angria was a Hindoo, as well as Sevagee; but his fleets were full of Arabs, and ſo were thoſe of his predeceſſors. See the attack made on an India ſhip called the Preſident, in 1683. Orme, p. 171.—The Arabs . . . the firſt navigators in the world for the Indian ſeas. Sir John Chardin, in Renaudot, p. 147.

[78] When the Portugueſe came to India, the Arabians tranſacted all the trade of the Eaſt. Renaudot, p. 173.

[79] See Hunter's journey from Agra to Ougein. India Annual Regiſter 1800, Miſcel. p. 279.

modern information; for Ougein [80], as it is at preſent ſubject to Scindia, and the capital of his jaghire, ſo was it, from the earlieſt ages, the propereſt ſituation for a metropolis, as being in the centre of thoſe tribes of Hindoos which have been leſs [81] intermixed with foreigners, and leſs ſubject to invaders, than the other tribes of Hindoſtan. Its pre-eminence and importance are ſtill farther proved by its having been, and ſtill continuing, the firſt meridian [82] of the Hindoos, which appears from accurate Engliſh obſervations to be in long. 75° 51′ 0″ [83] from Greenwich, and its latitude 23° 11′ 12″. The ruins of the ancient Ozênè are ſtill diſcoverable, at a mile diſtance from Ougein; and coins and bricks are ſtill dug up there, at the depth of fifteen feet or more. Pliny makes no direct mention of Ozênè, but incidentally only, as denoting a ſpecies of the ſpike-

[80] Written Ujjayini, Ujjein. D'Anville, India, p. 95. Ujjayini awinti, or avanti. Hunter.

[81] The revolt of Sevajee, the founder of the Marhatta power, was in the time of Arungzebe, when the houſe of Timour was in its meridian ſplendor. Theſe Hindoos of the Dekan had never been reduced; and though the Rana of Ougein, who was the principal of the Hindoos of Agimere, had been ſubdued by Acbar, the interior was ſo difficult of acceſs, that there had always remained tribes in the mountains who were independent. Sevajee (or, as he is otherwiſe called, Bonſoola) firſt reduced the mountaineers of the Dekan into order, and formed them by diſcipline till he ſet the Mogul power at defiance: he plundered Surat repeatedly, ſpread his incurſions on every ſide, and levied contributions to a vaſt amount. He died poſſeſſed of a ſovereignty, which grew up during the decline of the empire under the ſucceſſors of Aurungzebe, and has become the greateſt Hindoo power ſince the firſt invaſion of the Mahomedans.

[82] See Aſiat. Reſearches, Lond. ed. v. p. 194. and India Regiſter 1800, 292. Miſcel. longitude determined by eleven obſervations of Jupiter's Satellites; latitude, by eight.—Another firſt meridian was at Lanca, or Ceylon. Paolino, p. 309.

[83] Jeſſing, or Jaya Sinha, ſoubadalir of Meliva, in 1693 conſtructed obſervatories at Ougein, Dehli, Benares, and Matra. Sir Rob. Barker deſcribes the obſervatory at Ougein, and found the latitude to be 23° 10′ 24″, which the native obſervers made 23° 10′, ſeconds they do not notice; but it appears likewiſe that they had inſtruments and books from Europe. Mr. Hunter doubts the antiquity of Hindoo aſtronomy, and informs us, that when he was at Ougein, Jeſſing's obſervatory was turned into a foundery for cannon. Aſiatic Reſearches, v. p. 196. Lond. ed.

nard;

nard; but Ptolemy calls it the capital of Tiaſtánus, and his royal reſidence: he places it on the Namádus, or Nerbudda, which is the river of [84] of Barugáza; which river is ſaid to riſe out of the ſame lake as the Saone, and which takes an eaſtern direction; ſo that the courſe of the two rivers into the ſea, eaſt and weſt, turn what is called the peninſula of India into an iſland.

D'Anville [85] conſiders Ougein as the reſidence of Porus, who ſent an embaſſy to Auguſtus. The rajah is called Rhana, and pretends to be deſcended from Porus, who was defeated by Alexander. Fabulous accounts of Alexander are as current in the Eaſt, as in Europe; and for the ſake of proving the antiquity of his family, a prince might have the vanity to think it an honour that his anceſtor was defeated and conquered. But Porus ſignifies a chief or ſovereign: it may have been an appellative, as well as a proper name; and the ſovereign of Agimere, if his influence extended over Guzerat in the age of Auguſtus, might have had commercial [86] tranſactions to regulate with the Roman empire.

From Ozênè every ſort of commodity is brought down to Barugáza, which can contribute to the ſupply [87] of the country, and many articles for foreign trade [88], comprehending

Ὀνυχίτη λιθία,	- - -	Onyx ſtones.
Μυῤῥίνη,	- - - -	Porcelane.
Σινδόνες Ινδικαὶ,	- - -	Fine muſlins.
Μολόχιναι,	- -	Muſlins of the colour of mallows.

[84] Major Rennell, in his firſt map, placed it on a ſtream that ran into the Nerbudda; in his corrected map, it is on a branch of the Siparch, which joins the Chumbal, and falls into the Jumna.

[85] Antiq. de l'Inde, p. 95.

[86] This is upon the ſuppoſition, that the 120 ſhips which Strabo ſaw at Bereníkè actually reached India.

[87] Εὐθηνία.

[88] Πρὸς ἡμετέρας ἐμπορίας, for *our* trade.

Ἰχνὸν

Ἰκανὸν χυδαῖον ὀθόνιον, - - - A large quantity of ordinary cottons.

And many articles that only pass through Ozênè to the coast, from the country farther inland; as from the Panj-ab [89],

Νάρδος, - - - -	Spikenard, of different sorts.
Καταβερίνη [90], - -	
Πατροπαπίγη, - -	
Καβαλίτη, - - -	
Κόστος, - - - -	Kostus.
Βδέλλα, - - - -	Bdellium. A gum.

The Imports at Barugáza are

Οἶνος, - - - -	Wine.
Ιταλικὸς προηγμένως, -	Italian wine, in preference to all other.
Λαοδικηνὸς, - - -	Laodicêan wine. Syrian.
Αραβικὸς, - - -	Arabian. *Quere*, Palm, or Toddy?
Χαλκὸς, - - - -	Brass.
Κασσίτερος, - - -	Tin.
Μόλυβδος, - - - -	Lead.
Κοράλλιον, - - -	Coral.
Χρυσόλιθον, - - -	Topazes.
Ἱματισμὸς, - - -	Cloth.
ἁπλοῦς, - - -	plain.
νόθος παντοῖος, - -	mixed, of all sorts.
Πολύμιται ζῶναι πηχυαῖαι, -	Variegated sashes, half a yard wide.

[89] Προκλαΐς.

[90] I imagine all these to be different species of Nard, taking their name from the places from which they come. And if a conjecture may be allowed, Καβαλίτη is from Kabul, a mart through which it might regularly pass out of Tartary, or Thibet, its proper soil. Al Edrissi uses the term *Myrobalanos Kabolinos*, for the Myrobalans of Kabul, p. 66.

Στύραξ,

Στύραξ,	-	-	-	Storax.
Μελίλωτον,	-	-	-	Sweet lotus.
Ὕελος ὠργὴ,	-	-	-	White glaſs.
Σανδαράκη,	-	-	-	Ore of Cinnabar.
Στῆμι,	-	-	-	Stibium for tinging the eyes.
Μύρον ἐ βαρύτιμον,		-	-	Ordinary perfumes, or unguents,
ἐδὲ πολὺ	-	-	-	and in no great quantity.

Beſides ſpecie, upon which there was a profit, and the preſents that went up to the king at Minnagar, as mentioned before. It is not evident why theſe preſents were not rather landed at Barbárikè, which was the direct port for Minnagar, than at Barugáza; but our author ſays, that the king of Minnagar was ſovereign of Barugáza alſo. Perhaps, by their being mentioned here, they went only to the viceroy or ſoubah of the province. The expreſſion in the text is dubious [91]; but the context ſeems to imply, that from the country to which theſe preſents went up, there came down in return, diſtinct from the exports of Barugáza,

Νάρδος,	-	-	-	Spikenard.
Κόστος,	-	-	-	Koſtus.
Βδέλλα,	-	-	-	Bdellium.
Ἐλέφας,	-	-	-	Ivory.
Ὀνυχίνη λιθία,	-	-	-	Onyx ſtone.
Σμύρνα,	-	-	-	Myrrh.
Λύκιον,	-	-	-	Box thorn.
Ὀθόνιον παντοῖον,		-	-	Cotton of all ſorts.
Σηρικὸν,	-	-	-	Silk.

[91] Τῷ βασιλεῖ κατ' ἐκείνους τοὺς καιρούς. *Had Cuzcrat revolted, and ſet up a king of its own, at that time?*

Μολόχινον,

Μολόχινον, - - - - Mallow-coloured cotton.
Νῆμα, - - - - Silk thread.
Πέπερι μακρὸν, - - - Long pepper.

And other articles from the ports in the neighbourhood. Several of theſe are the ſame as thoſe that were ſpecified as procurable at Barugáza, and conſequently we can ſee no reaſon for the recapitulation, except the different means of obtaining them from a different part of the country. Such, however, are the commodities in general derived from the North and from the Eaſt, and ſuch was the importance of the commerce of this place in the time of Pliny. Zízeris and Muzíris, farther to the ſouth, ſeem to have been the more particular object of the voyage by the monſoon, acroſs the ſea from Arabia to India direct; but in our author's age, though he mentions Muzíris, it is tranſiently, in compariſon with Barugáza and Nelkunda: theſe ſeem to have been his grand marts. And for Barugáza, he ſays, the fleets left Egypt in the month of Epiphi, or July.

He ſtill perſiſts farther in the execution of the ſame deſign; for, after ſtating what was obtained from the Panj-ab and Ozênè, he proceeds next to the ſouth, in order to ſhew what was the connection between Barugáza and the Dekan. This is, if the boaſt may be allowed, the peculiar pre-eminence of the work: it belongs to this author alone, as far as I have diſcovered, to give the true direction of this weſtern coaſt of the peninſula, and to ſtate, in direct terms, its tendency to the ſouth, while Ptolemy ſtretches out the whole angle to a ſtraight line, and places the Gulph of Cambay almoſt in the ſame latitude as Cape Comorin.

But the declaration of the Periplûs is this:—From Barugaza, the coaſt immediately adjoining which ran up north [to the river Mais, or

or Mahi], now ſtretches directly to the ſouth; the country is therefore called Dakĭna-bades [92], becauſe DAKHAN, in the language of the natives, ſignifies SOUTH. Of this country [which is called DAKHAN] that part which lies inland, eaſt of Barugáza, comprizes a great ſpace of wild and deſert country, and large mountains, in which are found leopards, tigers, elephants, vaſt ſerpents, hyenas, and baboons [93] of various ſorts. [But in the inhabited parts] there are alſo a great variety of different nations, and exceedingly populous, quite acroſs the peninſula to the Ganges [94]. Beſides this, in the territory of Dakhinabad there are two emporia, or marts, of more particular importance; for at the diſtance of twenty days ſouth from Barugáza lies [95] Plíthaina, and ten days eaſt of Plíthana is found Tágara, which is the largeſt city in the country. The commodities from theſe two cities are brought down, through roads of great difficulty, by land-carriage, to Barugáza; that is, from Plíthana, a great quantity of onyx ſtone; and from Tágara, ordinary cottons [96]

[92] Dakin-abad, city of the South. Dakhina-wad, ſouthern region. Bayer. — Dacſhina. Paolino.

[93] Inter Simias, efferatior Cynocephalis natura, ſicut Satyris. Pliny, lib. viii. c. 54. c 80. Hardouin. See the authors he cites. Ariſtot. lib. ii. de Natura Anim. c. 13. Palmerius, &c.

[94] Τὰ μέχρι τῶν συϊγγυ;, which is nonſenſe; and Hudſon and Stuckius very properly read μέχρι τῆ Γάγγυ;.

[95] There is evidently an omiſſion in the text; for two cities are in the context, and only one of theſe is named. It appears that a part of the ſentence, and not the name only, is wanting.

[96] The cottons here called μολόχινα, Lieut. Wilford ſays, are thoſe dyed of a whitiſh purple, like the mallow-flower. There is nothing more ſingular in this than in the *blue* Surats, which at this day have a conſtant ſale on the oppoſite coaſt of Africa, in Abyſſinia, and in the ports of the Red Sea. Paolino interprets μολόχινα, chintz: tele finiſſime dipinti et richamente. P. 95. Fine cottons are ſuppoſed to derive the name of muſlins from Moſul, on the Tigris; a name which they had in common with gold tiſſue and ſilk, becauſe theſe articles were either made or to be purchaſed there. See Marco Polo, lib. i. c. 6. tutti li panni d' oro & di ſeta che ſi chiamana Moſſulini ſi lavorano in Moxul. Notwithſtanding this high authority, I am ſometimes inclined to think, that Μολόχινα is the origin of Moſſelins, or muſlins; though I have nothing to build on but the proximity of ſound, and conjecture.

in abundance, and all ſorts of muſlins, with a variety of other native productions which are not ſpecified.

It is manifeſt, that of theſe two cities, Deoghir is Tágara, and Plíthana is Pultaneh; that the difficult roads are the Ghauts[97]; and the mountains, that chain which runs parallel with the coaſt the whole length of the peninſula, from Guzerat to Cape Comorin. The country alſo between Guzerat and the Ganges does contain the deſerts ſpecified, not only in the vaſt tract called Berar, but in many other parts of the extenſive territories occupied by the Mahrattas. The animals likewiſe are appropriate, and the whole is ſuch a picture as no ancient geographer ſupplies in ſo diſtant a quarter of the world; ſo accurate, that it is hardly ſurpaſſed by Strabo, in his deſcription of the countries of Europe.

Deoghir[98] was the ſeat of a Hindoo government as late as 1293, when it was taken by Feroze II. and is now a ruin near Elore, within four coſſes of Aurungabad, on the River Godavery. It was the capital of the province of Doulatabad; and the centrical ſituation of theſe three cities, afforded a convenient poſition to the Patan emperors, as well as Aurengzebe[99], from whence they might propagate their conqueſts in the Dekhan. But the ſubterraneous excavations[100] at

[97] The Ghauts are literally the paſſes from the low country, over the mountains, into the upper region; but are generally uſed for the mountains themſelves.

[98] Rennell has another Deogur upon the Tapti, p. 237. and Ptolemy has a Tiagura, as well as a Tágara. His Tiagura, indeed, is on the Nerbudda; but it is doubtleſs Deogur, near Nagpoor. Rennell, Mem. p. 213.

[99] Aurungzebe was uſually at Amednagur. Orme.

[100] See the wonders of theſe ruins diſplayed in the magnificent and highly-curious work of Daniel, from the drawings of Wales. There is an apparent ſtamp of antiquity upon theſe excavations, ſuperior to thoſe of Elephanta, Mabalipooram, &c. for there are fewer figures diſtorted with a multiplicity of arms and heads, there is a grace almoſt Grecian in ſeveral of the deities, and throughout, much leſs of the groteſque barbariſm and obſcenity than are found in the more recent ſtructures of their ſuperſtition.

at Elore [101], and the pagodas there, extending over a tract of two leagues at the preſent hour, imply an antiquity now inexplorable, and preſerve the veſtiges of a ſuperſtition coeval with the remoteſt era of Braminiſm. Theſe remains qualify the ſpot for the ſite of Tágara [102], as early as the account in the Periplûs; and it is manifeſt that the author ſpeaks of it as a capital of a province, or a kingdom at that time exiſting, and the centre of the commerce from the interior.

Lieut. Wilford has a diſſertation [103] on this city, inſerted in the firſt [104] volume of the Aſiatick Reſearches, in which he makes the diſtances from Baroach agree with thoſe of the Periplûs, by reckoning eleven miles as a day's journey for a loaded cart in that country; but twenty days ſouth to Pultanah [105], and ten days eaſt from Pultanah to Deoghir, is more than I can find by the ſcale of any map which has fallen under my inſpection; neither do I find Pultanah mentioned in the maps of d'Anville, Rennell, or de la Rochette. Great allowances, however, are to be made for the winding of the roads, and the difficulties of the intervening ghauts; while the ruins of Elore, on the actual ſite of Deoghir [106], with the point of the

ſuperſtition. The wealth, the power, and the labour, requiſite to form theſe excavations, equal, if not ſurpaſs, all that muſt have been employed in the edifices of Egypt.

[101] Elore has been viſited by Thevenot and Auquetil du Perron.

[102] Deo-Ghur, the Hill of the Gods. A. Hamilton.

[103] As a commentator on the Periplûs, many thanks are due from me to Lieut. Wilford; and with the whole of his hiſtorical deductions I perfectly agree. But his tranſlation of κατάγεται μεγίσταις ἀνοδίαις, is refined, rather than correct: goods *brought down* to Baroach, or *carried up* to Tagara, is a phraſe as familiar in Greek as in Engliſh; and μεγίσται ἀνοδίαι, without being a tranſlation of Bala Ghauts, fully identifies the difficulties of the roads through the mountains; ἀνοδίαι never ſignifies *aſcent*, as far as I can diſcover, but ἄνοδος only; and if it did, to bring carriages *down* an *aſcent* muſt be a ſoleciſm.

[104] P. 369. Lond. ed.

[105] Lieut. Wilford reckons 217 miles from Baroach to Pultanah on the Godavery.

[106] D'Anville has placed Tágara at Satara, in the Mahratta country. Antiq. de l'Inde, p. 108.

compaſs ſouth-eaſt from Barugáza, give a probability to the whole which is irreſiſtible.

It were to be wiſhed that other Gentlemen, employed in the Eaſt, would apply their local knowledge to the removal of theſe obſcurities, as effectually as this meritorious officer has done in the preſent inſtance. Obſervations on the ſpot, confirmed by evidences peculiar to the country, form the true ground of proof, on which alone thoſe who collect and compare in the cloſet ought to depend. This evidence is appealed to by Lieut. Wilford; for the name of Tágara, written with the orthography of the Periplûs, occurs in a grant [107] of land found, engraven upon copper, in the Iſle of Salſet, near Bombay; and the rajah of the inland capital, by this monument, ſeems to have been connected with the coaſt, as effectually as Tágara was connected with Baroach eighteen centuries ago.

If we ſhould now deſcribe the arc of a circle, from Minnagar on the Indus, through Ougein, to Dowlatabad on the Godavery, of which Baroach ſhould be the centre, we might comprehend the extent of the intelligence acquired by the merchant of the Periplûs. But allowing that this was the knowledge of the age, and not of the individual only, where is this knowledge preſerved, except in this brief narrative? which, with all the corruptions of its text, is ſtill an ineſtimable treaſure to all thoſe who wiſh to compare the firſt dawning of our knowledge in the Eaſt with the meridian light which we now enjoy, by the intercourſe and conqueſts of the Europeans. An arc of this ſort comprehends near three degrees

[107] The date of this grant anſwers to the year 1018 of our era: it was communicated to the Aſiatick Society by General Carnack, and has every evidence of authenticity. If the reader ſhould refer to it, he will find, that in the conveyance of land the lawyers of all countries are equally liberal of words. See Aſiat. Reſearches, vol. i. p. 357. Lond. ed.

of

of a great circle; and if upon ſuch a ſpace, and at ſuch a diſtance from the coaſt, we find nothing but what is confirmed by the actual appearance of the country at the preſent moment, great allowance is to be made for thoſe parts of the work which are leſs perſpicuous; for the author did certainly not viſit every place which he mentions; and there are manifeſtly omiſſions in the text, as well as errors and corruptions.

VIII. ARÍAKÈ OR CONCAN, THE PIRATE COAST, AKABAROOS, OOPARA OR SÚPARA, KALÍENA OR BOMBAY, SEMULLA, MANDÁGORRA, PALAIPATMAI, MELIZÉIGARA, TÓPARAN, TURANNOS-BOAS, SESEKRÉIENAI, AIGIDII, KÁINEITAI, LEUKÈ.

THAT the author was at Barugáza, cannot well be doubted by any one that adverts to the variety and minuteneſs of his deſcriptions at that place. Whether he went farther down the coaſt to the ſouth, or took his account from other voyagers, may not be ſo certain. D'Anville [108] ſuppoſes that he accompanies us to Cottonara, and then takes one bound to Comorin and Ceylon; but I wiſh to make no aſſertion either way. My own doubts ariſe from the impoſſibility of diſcovering [109] thoſe characteriſtic features, which are ſo eaſily traced in the narratives of thoſe who have actually viſited the country they deſcribe. The coaſt we are now to follow, has few bold or prominent diſtinctions; many rivers, but none large or majeſtic; many ports, but fitted moſtly for the reception of the

[108] Antiq. de l'Inde, p. 118.

[109] The diſtrict of Nelkunda is an exception to this.

veſſels of the country alone; and only two capes worthy of notice, upon an extent of eight hundred and fifty miles.

Another method of inquiry is naturally ſuggeſted, by ſimilarity of names; and of this I ſhall be as ready to avail myſelf as thoſe who have preceded me in the attempt. Nothing, however, is more fallacious, if the ſituation be not as correſpondent as the name; and names ſeem to have fluctuated more in India than in any other country that we know: a ſpecimen we have juſt ſeen in Tágara, Elore, and Dowlatabad; all three appropriate to different ages, and all now concluded under Arungabad [no]. The names alſo of Al Edriſſi, in the middle century, differ as much from the ancient names of Ptolemy, Pliny, and the Periplûs, as they do from thoſe of the cities and diſtricts which are at preſent in exiſtence. Mr. Orme, in the introduction to his illuſtrious hiſtory, has imputed this to the vanity of princes; and Tippoo Sultan confirmed this remark, by changing the name of almoſt every place in his dominions.

The great ſcope for conjecture, and the very few places which can be aſcertained of all thoſe which are enumerated upon the coaſt which we are now to inveſtigate, is compenſated, in ſome degree, by the appropriate deſcription of the provinces or diſtricts we are to viſit. I agree perfectly with Major Rennell, in conſidering this as an object of much greater importance, than the placing of a town or a harbour on the map. And the fact is, that the different nature and properties of the diſtricts are indelible; while the ſite of cities

[no] Aurungabad takes its name from Aurungzeb, and ſeated here or at Amednagur, in a centrical ſituation. He carried on his inroads into Golconda, Viſiapour, and the ſtates of Sevajee; truſting his armies to his ſons and his generals, and directing them all from this point. This bigot, hypocrite, and tyrant, is the primary cauſe of all the miſeries that Hindoſtan has experienced for almoſt two centuries.

or

or fortreſſes has been changed, according to the prevailing intereſts of the day, or the caprice of conquerors.

The whole weſtern face of the peninſula, from Cambay to Cape Comorin, is nearly equal to fifteen degrees of latitude. This extenſive tract appears upon the map divided into ſix provinces, or diſtricts, under the names of Cambay or Guzerat, the Concan, the Dekhan, Canara, Malabar, and Travancore [111]. Correſpondent to theſe, we have in the Periplûs the province of Barugáza, the Lárikè of Ptolemy, equivalent to Guzerat; Aríakè [112] to Concan, or the Pirate Coaſt, between Bombay and Goa; Limúrikè to Canara, between Goa and Malabar; the Kingdom of Pandion, anſwering to the upper part of Malabar, including Calicut and Cochin; Paralia to Travancore, as far as Cape Comorin; and the Pearl Fiſhery, extending from Comorin to the Iſlands of Rami-ceram and Manar. The limits of theſe will appear diſtinctly in the proſecution of our inquiry; and if we fix the boundary of Lárikè at the Tapti, and include the modern Dekhan of the coaſt within the confines of Aríakè, our ancient geography will prove conſiſtent with the modern diviſion of the provinces. For, notwithſtanding the fluctuations of power, or the change of maſters, theſe are marked by characteriſtics that ſeem indelible. The only difference is, that the Periplûs has no ſpecific diſtrict equivalent to the Dekhan, but uſes that term, in its general acceptation, as it is employed at the preſent day, embracing the provinces of the peninſula in contra-diſtinction to Hindoſtan.

[111] Travancore, though a kingdom of itſelf, is generally included in Malabar, as well as Calicut and Cochin.

[112] Αριακὴ, Λιμυρικὴ, Κοττοναρικὴ, are all adjectives with γῆ implied; but Aria, Limyra, or Cottonara, do not occur in the form of ſubſtantives throughout the work. I conclude that Papikè, the correſpondent name to Diu Head, is an adjective likewiſe.

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The Periplûs ſeems to apply the name of Barugáza to the province as well as to the port; and this poſſibly, becauſe at that time it was ſubject to Minnagar; but Ptolemy calls it Larikè, and makes it part of the kingdom of Ozênè, with the other towns or places on the River Namadus or Nerbudda; and as long as there was a regular Hindoo power at Ougein, that city ſeems to be the natural metropolis of the country. With equal propriety, the Tágara of Ptolemy and the Periplûs, is connected with the Pirate Coaſt, both comprehended in the province of Ariakè, and both ſubject to Baleokoorus, whoſe capital was at Hippokoora, ſuppoſed by D'Anville [113] to be the Balhara[114] of Al Edriſſi[115]. His title was King of Kings, and he was connected with another prince or rajah at Baithana, called Siropolémius [116], whom Lieut. Wilford [117] makes the Salibaham of the Hindoos, and his metropolis, Pattán. I am not ſufficiently informed, to confirm or invalidate theſe opinions; but I find that the Balahara [118] of Al Edriſſi reſided at Naherwalleh [119], the ancient capital of Guzerat, prior to Amedabad; and if ſo, Ptolemy would have placed Hippokoora [120] in Larikè, and not in Aríakè, where it now

[113] Antiq. de l'Inde, p. 93.

[114] Paolino places the Balahara in Concan (Kemkem), on the authority of Renaudot's Arabians. Balhara, he ſays, is Balia Raja, Great King; but if in Concan, he is certainly not the Balhara of Al Edriſſi. He adds, "Se D'Anville aveſſe fatto il viaggio dell' "India, prima di ſcrivere la ſua Antichita del "India, non avreſſe commeſi tanti ſpropoſiti "nei ſuoi libri." P. 98. He treats none of us who write at home with greater civility. Hippokoora, the capital of Baleo-kooras in Ptolemy, is in Concan, or what in his map anſwers to Concan, and not to Guzerat.

[115] P. 62.

[116] Sri, or Shri, is an inferior title of reſpect, like our *Sir* or *Mr*. See inſcription at Tanna. Aſ. Reſearches, vol. i. p. 367. Lond. ed.

[117] Diſſertation on Tágara, p. 373.

[118] See Bayer, Hiſt. Reg. Bact. p. 29. who cites ſeveral Oriental authorities, but determines nothing.

[119] Nahroara, Nahrwara, Nahrwallah.

[120] Hippokoora, compared with the relative ſituation of places round it, might lead us to ſomething not very diſtant from Poona, the preſent ſeat of the Mahratta government, were it not on a river that comes into the Weſtern Sea. Poona is above the Ghauts, about 100 miles S.E. from Bombay; and there is no river, on this part of the coaſt, that comes from the other ſide of the Ghauts.

ſtands

ſtands in his geography. But I am perſuaded that both Ptolemy and the Periplûs agree in the general diviſion and relation of Larikè and Aríakè, and differ only in the appellations they have adopted. The names of places, rivers, mountains, and provinces, in Ptolemy, are as aſtoniſhing as his errors in poſition, longitude, and latitude, are manifeſt. His poſitions, however, are for the moſt part relatively right, though they are eſſentially wrong; and the errors of his longitude, in which he is principally miſtaken, muſt have ariſen from his manner of acquiring information—by interrogating the merchants and mariners at Alexandria, whoſe reports were from memory, and not from journals. But it is evident, that many of theſe muſt have penetrated far inland, otherwiſe he could not have left us the great outline of truths which is ſtill manifeſt in his works, and which makes us forgive all his particular errors, in conſideration of the general and important information that we obtain.

VIII. I am now to enter upon the deſcription of this coaſt, incidentally traced by Hardouin, Robertſon, Rennell, Paolino, and many others; but where no one has regularly gone before me, through the whole extent, except d'Anville. His concluſions I ſhall be compelled to queſtion, but it will not be done without diffidence on my part, and without due reſpect to his learning and abilities; for d'Anville is the firſt writer, properly ſpeaking, who has taught us to inveſtigate the geography of the ancients, by tracing the characters of different coaſts and countries as they exiſt at preſent: to him we look up, as to a maſter in this branch of the ſcience; and even where his errors are demonſtrable, we cannot but reſpect the extent of his learning, experience, and information.

At the commencement of our inquiry, the firſt information we receive from the Periplûs is, that the extent of the coaſt from Barugáza to Limúrikè is ſeven thouſand ſtadia, or ſeven hundred miles; but as this would carry us, at one ſtep, to Mount d'Illi [121], it is rejected by Rennell, d'Anville, and I believe all the writers who have examined the ſubject. The commencement of Limúrikè, our author has placed at Naôora, Tyndis, and Muzíris. And as it will hereafter appear that theſe places muſt be near the northern limit of Canara, and that therefore we have every reaſon to conclude Limúrikè has nearly the ſame limit as that province, we cannot take off leſs than two hundred from the ſeven hundred miles, to preſerve the proportion of the coaſt. This is one reaſon, among others, which may induce a doubt, whether or not the writer of the Periplûs performed this part of the voyage himſelf.

The firſt places mentioned, upon leaving Barugáza, are

Akabároos [122], *Oópara*, and *Kallícna*.

In

[121] In conſideration of this circumſtance, and my general dependance on the meaſures of the Periplûs, I was originally diſpoſed to conſider Aríakè as comprehending the whole coaſt, from the Tapti to Mount d'Illi; and if the Province of Limúrikè were to commence at that cape, the iſlands off the coaſt of Limúrikè, that produce the tortoiſe-ſhell, according to the Periplûs, and which may be well aſſumed for the Lack Dives, correſpond better with a Limúrikè ſouth of d'Illi, than north. But the ſtrong ground that Rennell has taken for aſſigning Nelkunda to Neli ceram; the circumſtances at that place according ſo eſſentially with the ancient account; the diviſion between Limúrikè and the Kingdom of Pandion, that is, Canara and Malabar; added to the correſpondence of the iſlands on the coaſt, made me prefer the arrangement which I have adopted. The detail of this will be explained at large as we proceed.

[122] It is not affectation, or a love of ſingularity, that induces me to aſſume the Greek kappa, rather than the c of the Latins, or the Engliſh diphthong oo, for the Greek ου; but a hope that the true ſound, and true orthography, may direct the eye or the ear of modern travellers, or voyagers, to the diſcovery of ancient names. The diſtortion of European names by Oriental writers is aſtoniſhing to us; and our mode of expreſſing Oriental ſounds, received by the ear, muſt be equally offenſive

to

In regard to Kalliena, all ſuffrages [123] are united to fix it in the neighbourhood of Bombay; for Bombay is upon an iſland, cloſe to which, on the main, was an ancient city called Gallian. The ruins of Gallian ſtill remain, and are noticed by Fryer [124] in 1675, as the moſt glorious ruins in the Dekhan the Mahomedans ever had to deplore. His account proves it to have been a city of the Hindoos, and its ſituation commanding Baſſeen, Salſet, and Bombay, gives it a pre-eminence as a mart of commerce in all ages.

But if we have ſo much concurrent teſtimony for fixing Kalliena near Bombay, we have almoſt two hundred miles of coaſt on which we are to look for the other two places named; and if Oópara be the Soopara of Ptolemy, as is generally allowed, it muſt be a place [125] of ſome note [126]; for Subara is joined with the mention of Cambay, in the middle ages, by Al Edriſſi. It is ſuppoſed, by d'Anville, to anſwer to the Sefareh el Hende of the Oriental geographers, in contradiſtinction to the Sefareh el Zinge on the coaſt of Africa, which is the Sofala of the Portugueſe; and theſe two Sofalas, one in India, and the other in Zanguebar, are ſuppoſed to be in conſtant habits of mutual commerce and correſpondence, by means of the alternate monſoons.

An intercourſe of this kind between Guzerat, and the coaſt of Africa, I have mentioned in the former part [127] of this work, which

to their perceptions. Ebn Haukal writes Sakaliah, Akrites, and Kibres, p. 53. which would certainly require ſome attention of the mind before a common reader would diſcover that they are Sicilia, Creta, and Cyprus.

[123] Orme, Rennell, Robertſon, d'Anville, &c. Coſmas has Caranja in the harbour of Bombay.

[124] Orme, Hiſt. Fragments, note 30.

[125] It was the ſee of a biſhop, as early as the ſixth century. Καὶ ἐν τῇ Καλλιάνα δὲ τὴ καλουμένη καὶ Επίσκοπος ἐστιν ἀπὸ Περσίδος χειροτονούμενος. Coſmas Paolino 100. That is, from Moſul of Marco Polo. Lib. i. c. 6.

[126] Supura ſignifies a ſplendid city. A. Hamilton.

[127] Pages 145, 146. 253.

the Periplûs deſcribes as previous to the voyages of the Greeks in the Indian Ocean, and totally unconnected with them; conducted by native merchants on both ſides, or by Arabs, who were carriers for both. On this latter point there can hardly be a doubt, when we find that the veſſels employed in this trade ſometimes diſcharged part of their lading in Zanguebar, and proceeded afterwards to Arabia; and when we learn from the ſame work, that moſt of the ſettlers on that coaſt were Arabs, and ſeveral of the places ſubject to the different ſheiks of Arabia, as they are at this day. Theſe are the large veſſels from India, which Agatharchides deſcribes as early as the time of Philadelphus, found by the Greeks in the ports of Arabia; and from which they obtained all the commodities of the Eaſt before they went to India themſelves. This commerce we may carry back to the ages long antecedent to hiſtory, and conclude, that as the monſoon muſt be known to the inhabitants of both coaſts from the time they were inhabited, ſo muſt the communication have been opened from the earlieſt period in which mariners ventured to commit themſelves to the ocean.

It is almoſt ſuperfluous to add, that the Sefarch both of Africa and India has been converted into the Ophir of Solomon, as it has ſuited the hypotheſis of different authors, to carry his fleets to the eaſt or to the ſouth; and fortunately, both opinions may be maintained or combated, without danger of controverting the authority of ſcripture.

After all theſe various particulars, which are left to the diſcretion of the reader, there does appear ſomething of importance in the circumſtance of Sooppara continuing a place of note, from the age of Ptolemy and the Periplûs to the time of Coſmas and

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Al Edriſſi [128]; and it ſeems not impoſſible to determine its ſituation, by obſerving that Ptolemy places it on the north of the firſt great river ſouth of his Namadus, or Nerbudda: this river muſt be the Tapti, and the place north of the Tapti muſt be Swalley, or ſome place near it; in the front of which lies the road of Surat. How d'Anville could carry this down to Sifferdam [129], ſeventy miles ſouth of Bombay, when he unites in ſuppoſing Kallíena and Bombay to be the ſame, is inconceivable; but as he places his Sefarch el Hinde there alſo, the reſemblance of a name has made him diſregard the arrangement of his author: but if the author has any meaning, Soopara muſt lie between Baroache and Bombay, and moſt probably in the vicinity of Surat. Surat itſelf is ſaid to be a modern [130] city; but a mart in its neighbourhood muſt always have commanded a great acceſs to the interior, as the Tapti extends upwards, from the ſea, full four hundred miles, and communicates by its branches with a variety of diſtricts which are rich and flouriſhing. It is this circumſtance which has made Surat ſuperior in commerce to Baroache, for theſe three laſt centuries, as being eaſier of approach; and whatever city ſupplied its place on the Tapti muſt have partaken of theſe advantages, and ſuch apparently was the Soopara, or Oopara, of the ancients. It is very remarkable, that Rennell has an Oolpar a little to the north-eaſt of Swalley, in his corrected Map of India; but as he does not mention it in his Memoir, I cannot diſcover whether it is ancient or modern—a city or a village. I build little upon ſimilarity of names; but as many gentlemen, now in England,

[128] By the repeated mention of Subara with Cambay in Al Edriſſi, I had hoped to connect it with the Suppara of Ptolemy; but I think he means to place it north of Baroache, which he calls Beruh; if ſo, it will not anſwer our purpoſe. But I cannot always follow his wanderings.

[129] Antiq. de l'Inde, p. 104.

[130] Which is proved by Capt. Hamilton, in his Account of the Eaſt Indies, vol. i. p. 144.

have been reſident at Surat, if any thing ſhould have occurred to their obſervation, they will be gratified by the introduction of this name to their recollection.

For Akabaroos I can find no repreſentative: it may be fixed any where between Baroache and Surat; but as there is a ſmall ſtream called Kim, by Orme, in the intermediate ſpace, it is here that it ſhould be looked for, were there any thing to direct our inquiries. But this place was apparently ſeldom frequented, and therefore it is not to be expected that much information ſhould be left us by a merchant of Alexandria.

To return to Kallíena, the laſt name of the three mentioned. I join moſt readily in opinion with thoſe who have preceded me in the inquiry; and conſider the tablets diſcovered at Tana in Salſet, as a moſt valuable monument [131] for connecting the government at Tágara with the diſtrict on the coaſt. It is foreign to this work to enter into the preſent ſtate of Bombay, under the power of the Engliſh; but as the firſt factory of our countrymen was eſtabliſhed at Surat, it is intereſting to obſerve how the acquiſition of Bombay has enabled them to extend their influence over Surat, Baroache, and Cambay; to occupy the commerce of Guzerat, and to poſſeſs the power of dominion in thoſe marts, where the Romans enjoyed only the privileges of merchants.

In the age of the Periplûs, Kallíena was little frequented: in the reign of a former ſovereign, ſtyled Sáragan, it had been an eſtabliſhed port of commerce; but Sandánes [132], his ſucceſſor, admitted

[131] Theſe tablets, containing a grant of land, have been mentioned before; and if the manner of writing Tagara be literal, the evidence is complete.

[132] Al Edriſſi preſerves the name of Sandan applied to a mart five ſtations, or 150 miles, below Subâra. The ſituation is not amiſs; but whether it has any alluſion to the name of a rajah or ſovereign, is wholly dubious.

none

none of the veſſels that came from Egypt; and if any entered the harbour by accident, or ſtreſs of weather, he immediately put a guard on board, and compelled them to go to Barugáza. This circumſtance, Lieut. Wilford obſerves, ſavours ſtrongly of an improper conduct in the traders, or might ariſe from the jealouſy of a native power. The Romans ſhewed their influence, by erecting a temple to Auguſtus at Muzíris; and if we ſuppoſe an attempt of this kind made at Kallíena, it bears a reſemblance to the encroachment of Europeans on the natives, as well as the intruſions of the Arabs and Mahomedans. If we could have connected theſe governors, or rajahs, of the coaſt, with Mambarus, the ſovereign of Aríakè, or fixed the reſidence of Mambarus at Tágara, Plíthana, or Hippocoora, our picture would be complete; but on theſe points the Periplûs is ſilent.

The ports or marts in ſucceſſion [133] below Kallíena are

Semulla, Mandágora, Palaipatmai, Melizéigara, Tóparon of the *Buzantians*, *Turannos-boas*, the Iſlands *Séſekréienai*, the Iſland of the *Aigidii*, the Iſland of the *Káinetai* (in theſe places are the Pirates); and, after theſe, *Leukè*, or the White Iſland.

How this enumeration can have miſled thoſe who have preceded me in the inquiry, I cannot ſay; but to my apprehenſion we have the Pirate Coaſt, between Bombay and Goa, as manifeſtly delineated as we could require, and to that diſtrict our attention muſt be confined. On the primary point, indeed, of a coaſt infeſted by pirates, there is little difference of opinion; Ptolemy and Pliny are both in harmony with the Periplûs, and modern writers are generally agreed;

[133] Μετὰ δὶ Καλλίναν.

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for pirates there have been in all ages, as they are here deſcribed, till the Severndroog of Angria was taken by the Engliſh in 1765. But when we have obtained the coaſt, why any one ſhould travel out of it to find modern names correſpondent to thoſe of our author, is not eaſily reconciled to the canons of geography. All theſe names are given as what our ſeamen would call *country* ports, frequented [134] only by the natives; and whether we can find repreſentatives for them or not, is of no great importance, if we can mark the limits of the provinces; to effect which, the modern diviſions of the country may be of great aſſiſtance. Orme [135] has obſerved, that the Mahratta language is ſpoken from Bardez, or Goa, to the Tapti; and theſe very limits I would aſſign to the Ariakè of the Periplûs. It is well known, that the diviſion of provinces often ſurvives the revolutions of empire: the habits of the natives, and the boundaries of nature, are not always ſubject to the viciſſitudes of conqueſt; and as the Tapti was the probable limit between the government of Minnagar and that of Mambarus, on the north; ſo on the ſouth, there is a natural boundary between Goa and Canara; where we are alſo to look for the termination of Ariakè, and the commencement of the Limûrikè of the Periplûs.

For the ſituation of the few correſpondent places, which I ſhall propoſe for the conſideration of the reader, if the proofs ſhould not amount to conviction, I ſhall at leaſt do no violence to my author, or his text: I leave every thing free for diſcuſſion, as I find it; and even if my deductions ſhould be erroneous, they will affect my own

[134] Μετὰ δὲ Καλλίναν ἄλλα ἐμπόρια τοπικὰ. Rendered by Hudſon, Poſt Callienam alia ſunt emporia vernacula, quibus regionis incolæ tantum utuntur; and I conclude it is the true meaning, illuſtrated by καθ' ἃς τόπους, which immediately follows; and alſo by τοπικὰ πλοῖα. P. 34.

[135] Hiſtor. Fragm. p 57.

arrangement

arrangement only, and miſlead no one who is diſpoſed to proſecute farther inquiries on the ſubject.

D'Anville has transferred the four firſt names of the catalogue from Aríakè to Barugáza, or Guzerat; knowingly and deſignedly [136] rejecting the order of the journal, and placing Semulla at Sumnaut Pagoda, Mandagora at Mangherour, Palaipatmai at Patan, and Byzantian at Biſantagan; now, reckoning only from Bombay, this is a diſplacement of an hundred and fifty miles; while Fra Paolino, who corrects d'Anville, and contemns all writers who have not been in India, carries Mandagora to Mangalor in Canara, and Palaipatmai to Baleapatna near Tellicheri, and Kallíena to Calanapuri [137] near Mangaloor. There is only ſeven hundred miles difference in the diſpoſal of theſe names reſpectively; and a work which can admit of this latitude of interpretation, is either not worthy of a comment, or the different commentators muſt have preferred their own ſyſtems to all the evidence of their author.

To a common inquirer, the language of the Periplûs is perfectly conſiſtent; and if a reſemblance of names has miſled men of ſuperior information, it ought to ſet others more eſpecially on their guard to follow the arrangement of the work which they have undertaken to explain, and not to erect ſyſtems of their own, which can be ſupported only by a perverſion of the text.

The Pirate Coaſt was not formerly, and is not now, ſo totally inhoſpitable as to exclude all intercourſe: the Portugueſe had ſettle-

[136] Il ne faut point avoir égard à ce qu'on lit *enſuite* comme par forme de tranſition μετὰ δὲ. Antiq. de l'Inde, p. 101.

[137] P. 100. Upon the whole of this there is only one queſtion to propoſe: Does not Paolino allow Aigidii to be the Angedives? p. 101.; and if he does, did he ever aſk himſelf the queſtion, whether thoſe ports are placed to the north, or the ſouth, of Aigidii, in the Periplûs?

ments at Daman and Baſſeen, north of Bombay, as well as at Choul and Dabul, to the ſouth; and it is a conjecture highly probable, that the Zizêrus of Pliny, and the Meli-Zeigara of the Periplûs, were at [138] Siddee-Zyghur [139], about an hundred and forty miles ſouth of Bombay. Pliny [140] informs us, that the fleet which left Egypt early [141] in July reached Okêlis in thirty days; and then employed forty more, in croſſing the ocean with the monſoon to the ſhores of India. The point where they left the coaſt of Arabia, was Syágros, or Fartaque; and the port they directed their courſe to, was Zizêrus. This had been the uſual track, but was not a ſafe one, becauſe of the pirates which infeſted the coaſt, and which made it neceſſary for the ſhips not to ſail without a body of archers on board; for this reaſon they had been latterly obliged to change their direction to Muzíris, though it was a more inconvenient place to receive their lading, and ſtill not ſafe from the attempts of the pirates in the neighbourhood. In the firſt inſtance, the pirates were on the coaſt;

[138] Major Rennell has a Sedaſhygur below Goa; it is written Sudaſh-gur in the Oriental Navigator, p. 220. It is the fort of Carwar, and totally diſtinct from Siddee-Zyghur near Rajapore, deſcribed in the Oriental Navigator, p. 215. This fort of Rennell's is ſituated on a high point of land, and being remarkably *white*, becomes very conſpicuous at ſea. If the point of land had been ſaid to be *white* inſtead of the fort, I ſhould have concluded that I had found the Leukè, or White Iſland, of the Periplûs.

[139] Zyghur probably takes the addition of Siddee from the Siddees, a mixed breed of Abyſſinians, Natives, and Caffres, eſtabliſhed in Viſiapoor, and maſters of a fleet upon the coaſt, employed by Aurungzebe againſt Sevagee. Orme ſays, they were a bold, ferocious race, and excelled all the navigators of India. Hiſt. Fragments, p. 81. But Cape Siddee is likewiſe written Cape Zeyd, and Cape Z. Zyghur, however, may be a place of modern date; I can find no other proof of its antiquity than what is here given, and therefore propoſe the whole with great heſitation.—It is written Jaigur in Moore's Narrative, pp. 2. 9. and Jaighur, by the ſame author. Gur, or ghur, is a *fort*; what is Zy? or Jai? or Zeid?

[140] Lib. vi. c. 23.

[141] Ante ortum canis. Pliny.—Salmaſius ſays, the Romans reckoned the 19th of July as the riſing of the Dog Star. 1188.

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in the ſecond, in the neighbourhood. This exactly agrees with the Periplûs, which places Muzíris, not in Aríakè, but Limúrikè; and when we come to Muzíris, we ſhall find a farther correſpondence that appears concluſive.

I wiſh to build no more on this conjecture than it will bear; but as I have found the utter impoſſibility of aſſigning poſitions to the places named in the Periplûs, and pretend to nothing more than preſcribing limits to the province, even a conjecture of probability is worth ſomething on a barren ſubject; and to another, which muſt follow it, I attach no greater importance.

Ptolemy has the Semulla, Balepatna, Byzantium, Mandágora, and Melizigêris [142], of the Periplûs, all upon the Pirate Coaſt; and on that coaſt, therefore, they undoubtedly exiſted, and not in Guzerat, where D'Anville has placed them, or in Malabar, whither they are carried by Paolino. That good Carmelite informs us, that Balepatna [143] ſignifies *a great city*; it is no great force, therefore, put upon this interpretation, to make it *the great city*, the capital, or the reſidence of a ſovereign. And on this coaſt we have two Rajapoors, meaning, literally, the City of the Rajah. The moſt northerly of theſe, called Dunda Rajapoor, does not diſagree with the Balepatna of Ptolemy. The diſtortion of his maps, however, does not allow us to ſpeak with preciſion on the ſubject; but if his Semulla be St. John's Point (which it is more like than any thing elſe), his Bale-

[142] Melizigêris, in Ptolemy, is an iſland, the ordinary in their miſplacement on the coaſt of India. His Ægidium is carried down to Ceylon.

[143] So Belia-puttun, great *puttun*, town or city. Moor's Narrative of Little's Detachment, p. 497.

patna lies ſomewhat ſhort of two degrees lower down than his Semulla, and Dunda Rajapoor lies nearly at the ſame diſtance from St. John's. If I gain nothing by advancing theſe conjectures, I at leaſt do no prejudice to my author; for his Palai-patmai is ſubſequent to Kallíena, and his arrangement is not diſordered by the preſent ſuppoſition.

But where there is ſo little certainty attainable, it will be ſome pleaſure to reſt at laſt upon a point that preſents us ſomething like truth. This, I am perſuaded, I have found in the iſlands that terminate Aríakè—the Concam of the moderns, the Kemkem of the Arabian geographers, and the Pirate Coaſt of all. I aſſume, then, the Seſekréienai of the Periplûs for the Burnt Iſlands, or Vingorla Rocks of the Charts; and the two iſlands of the Aigidii and Kainîtai, for Goa and Murmagon. Kainîtai is ſaid to lie cloſe to the Cherſoneſe [144]; and one only Cherſoneſe I find on the whole coaſt, which is Salcet, ſurrounded almoſt by the Sound of Goa, and the River Nerengal, and ſo conſpicuous, that it may be conſidered as a certain proof of a poſition not to be reſiſted. It is true that the Angedives are not forty miles from Goa; and the reſemblance of Aigidii to Angedives, has induced a general belief that they are the ſame; but the mention of two iſlands diſtinctly, and the vicinity of the Cherſoneſe [145], preponderate againſt all ſimilarity of names; and the boundary of the two provinces, which immediately enſues, added to the previous circumſtances, makes the evidence complete.

[144] Κατὰ τὴν λεγόμενην Χερσόνησον.

[145] The appearance of a Cherſoneſe is not ſo manifeſt in Rennell's Map, as in that of Orme; but the point off which the Angedives lie, cannot in any ſenſe be deemed a Cherſoneſe, but a promontory only. Should I be miſtaken, it is an error only of forty miles—moderate enough in compariſon of ſeven hundred.

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The Burnt [146] Iſlands, or Vingorla [147] Rocks, are a cluſter not [148] very well known, till lately, in lat. 15° 52′ 30″. They lie ſix or ſeven miles off ſhore, on a tract inhabited by a piratical tribe called Mulwaans, and are reckoned twenty [149] in number, ſeven of which are ſmall iſlets, while many of the others are barely viſible at high water; and there is a good channel between them and the main. The bare mention of ſuch a group in the plural, with their relative ſituation in regard to the Iſlands of the Aigidii and the Kainîtai, ſeems to qualify them for the repreſentatives of the Burnt Iſlands; while the Pirates, in their vicinity, adds to the reſemblance. Their diſtance from Goa is little more than thirty miles, and no other Iſland intervenes.

It is only the two iſlands of the Aigidii and the Kainîtai that I aſſign to Goa; that is, Aigidii [150] to Goa, and Kainîtai to Mur-

[146] The text is .... Τυραννος Γόας. Εἶτα Σποτχρείεναι λεγόμεναι νῆσοι, καὶ ἡ τῶν Αἰγιδίων, καὶ ἡ τῶν Καινειτῶν κατὰ τὴν λεγομένην Χερσόνησον, καθ' ἃς τόπους ἐισὶν Πειρατάι. Καὶ μετὰ πάυτην Λευκὴ νῆσος.

It ſeems as manifeſt here that ἡ τῶν Αἰγιδίων, and ἡ τῶν Καινειτῶν, are joined, as that Λευκὴ is diſtinguiſhed ſeparately by μετὰ ταύτην. D'Anville interprets Αἰγιδίων *hircorum*, and not without probability; for goats were placed on uninhabited iſlands by ancient as well as modern navigators; but I have not found the diminutive Αἰγιδίον from αἴξ. Dive, *an iſland*, is written Διϐὴ by Coſmas, and Αἰγὸς διϐὴ, or Αἰγιδιϐὴ, would be literally Goat Iſland.

[147] Seſekréienai, as I underſtand from Mr. Hamilton, ſignifies black rabbits. The caprice ſhewn by ſeamen in the names they aſſign to places, may excuſe the introduction of the term. Whether the iſlets themſelves lie crouching like theſe animals, or whether rabbits have been depoſited here like goats on other uninhabited ſpots, for the uſe of navigators, I have no means of aſcertaining; but as trivial a circumſtance as this may, ſome time or other, lead to the diſcovery of truth. The natives of the coaſt, no doubt, have a name for them: the title we give them is derived only from their vicinity to Vingorla, on the continent.

[148] Rennell's Memoir, p. 31.

[149] In the Oriental Navigator, p. 217. But there are ſeven principal rocks, or iſlets, in C. Huddart's Chart, by Mr. Dalrymple. There are alſo plans of Vingorla and Sinderdroog, the reſidence of the Mulwans or pirates of Melundy, among Mr. Dalrymple's drafts of places on the coaſt of Malabar.

[150] Aigidii, or Aigidiæ, comes ſo near Ange-dive, that it is aſſumed by almoſt every writer on the ſubject; and if it had preceded the Cherſoneſe, inſtead of following it, would have been concluſive. But the point off which the Ange-dive lies, would, I think, be called a Cherſoneſe by no ancient author.

magon.

magon; for Leukè, or the White Iſland, is ſeparated from them by the text, and I have little heſitation in carrying it to Angedive. This diſpoſition would account for all the iſlands upon this part of the coaſt, and place them in a relative ſituation perfectly conſiſtent with the Journal. Kainîtai cannot be queſtioned, if its vicinity to the Cherſoneſe be conſidered; but the aſſumption of Leukè for the Angedive I would leave to the determination of any Navigator acquainted with the coaſt, who could aſcertain whether it has any appearance of whiteneſs [151] to diſtinguiſh it from other Iſlands.

The Angedives ſignify five iſlands; and Ptolemy has a Heptaneſia, or group of ſeven iſlands, intended to repreſent this cluſter, but ſo miſplaced, as not to admit of any concluſion from it. One of theſe only is inhabited and fortified [152] by the Portugueſe, who have a garriſon here compoſed of malefactors exiled from Goa; the others, whether more or leſs than the numbers which give it different names, are only iſlets or rocks. The paſſage between the principal iſland and the main is clear; and this affords it a prominence, which may have entitled it to the notice of the Periplûs.

In the Sound of Goa, there is one principal iſland on which the city itſelf ſtands, with others ſo ſmall, that they are little noticed: all which had afforded a place of refuge for ſuch Mahomedans as had been driven from the Hindoo ports or cities on the continent, before the arrival of the Portugueſe. Here the Mahomedans of the peninſula collected, who intended to embark for Judda, and perform their pilgrimage to Mecca. This alone was ſufficient to make it a

[151] I have myſelf found no white iſland nearer than the Sacrifice Rock near Calicut, which is 270 miles from C. Ramas. That rock is white with the mute of birds, but it is too diſtant to enter into any arrangement with the part of the coaſt where we now are. Capt. H. Cornwall's Remarks, p. 26. mention this whiteneſs, as I am informed.

[152] Oriental Navigator, p. 221. It is a mile long, but not ſo much broad.

port

port of importance; and the more ſo, as we may conclude that the Hindoos had no influence and no ſhare in the government; for the Mahomedans had eſtabliſhed themſelves here, as the fugitives on the coaſt of the Hadriatick had done on the iſlands which now compoſe the city of Venice; and they ſeem, like them, to have formed a community, which was diſtinguiſhed by the name of Tricurii, or the Thirty Villages. The Portugueſe, from their firſt arrival, had conceived a deſign of occupying this poſition: they firſt built a fort [55] on Angedive, and in 1510 Goa itſelf was taken by Albuquerque; it was recovered again by the Mahomedans the ſame year, and finally retaken by Albuquerque in 1511. Under his auſpices, it became the head and centre of all the Portugueſe ſettlements in India; and is ſtill in their poſſeſſion, after a period of three hundred years.

D'Anville is diſpoſed to place Goa at Nelkunda; that is, at the ſouthern, inſtead of the northern boundary of Limúrikè; but he is not ſatisfied with his own ſuppoſition, and abandons it. He fixes, likewiſe, Aigidii at the Angedives; to which Paolino aſſents, without reflecting that there muſt be two iſlands together, connected with a group preceding and a ſingle iſland following. Theſe circumſtances cannot accord with the ſyſtem they have adopted; but are perfectly conſiſtent with the Periplûs, and the diſpoſition I have aſſumed. I have no predilection to this arrangement, becauſe it is my own; but I have tried the Journal by the beſt charts I have of the coaſt, and can find no points, either to the north or to the ſouth, which will correſpond; and therefore conclude, that by this every thing is done for obtaining the truth that the text will admit.

[55] Almeyda, according to D'Anville (Antiq. de l'Inde, 110), laid the foundation of a fort.

But

But the diviſion of the provinces remains ſtill to be conſidered; and the termination of Concan is fixed by our charts at Cape Ramas, about two-and-twenty miles ſouth of Goa; near which is Carwar, once an Engliſh factory in the territories of the Soonda Rajah; and the juriſdiction of this prince is ſaid by Capt. Hamilton to extend from Cape Ramas, about fifteen leagues along the coaſt to Meerzee, or Meerzaw. This tract, including the Angedive and the cape off which it lies, I ſhould wiſh to comprehend within the limits of the ancient Aríakè, and I think the modern boundaries favour the concluſion; for the kingdom of Canara does not commence but at the termination [154] of Soonda; and though I cannot aſcertain that the coaſt, north of Goa, called the Dekan, or ſouth of it, called Soonda, are conſidered as parts of Concan; yet it is very clear, that the limit of Soonda and Canara is at Meerzee. At Meerzee, therefore, I aſſume the boundary between Aríakè and Limúrikè, guided by the Leukè of the Periplûs, as the laſt place mentioned in Aríakè, and by Naoora, as the firſt place mentioned in Limúrikè. This aſſumption, if correct, will reconcile the poſitions on the whole coaſt, from Goa to Cape Comorin; and if erroneous, confines the error within the diſtance between Murmagon and the Angedive: an error, at the utmoſt, of forty [155] miles; moderate in compariſon of the diſagreements between d'Anville and Paolino; and cauſing no diſorder in the arrangement of the provinces, but ſuch as may be remedied by the moſt tranſient reference to the map.

The province of Ariakè was under the government of Mámbarus,

[154] See De la Rochette's Map of Hindoſtan, which agrees with C. Hamilton, and Hamilton remained ſome time at Carwar. See vol. i. 259. Orme likewiſe fixes it at Mirzeou. Hiſt. Fragments, p. 73.

[155] Rennell makes it fifty miles, De la Rochette thirty-five, and Orme the ſame number.

and

and Limúrikè, which we now enter upon, was ſubject to Kepróbotas, comprehending the modern kingdom of Canara, and terminating on the ſouth with the kingdom of Pandíon, which anſwers to the Malabar of the preſent day. The ports of this province will be treated of in their regular order; but before we deſcend to particulars, let us ſurvey theſe four diviſions of the coaſt, as they ſtand in the Periplûs, correſponding with the preſent diſtinctions of the provinces; let us add the poſſibility of aſſigning the reſpective limits in both inſtances, and then aſk ourſelves, whether this is not a more rational way of interpreting our author, than by ſearching for a reſemblance of names, which has miſled ſo great a geographer as d'Anville; and in which, if it were reaſonable to indulge, many new ſimilarities might be diſcovered, that have not yet occurred to any one that has proſecuted the inquiry.

The province of Barugáza, anſwering to Guzerat, under the power of Minnagar, commencing at the Indus and terminating at the Tapti, is the firſt. The ſecond is Aríakè, ſubject to Mámbarus; a ſovereign whom we might compare to Sevagi, or a Mahratta power of the preſent day; bordering north on Guzerat, and ſouth on Canara; of the ſame extent as the Pirate Coaſt, and diſtinguiſhed at this day as fixing the ſame boundary to the Mahratta language, as to the province, ancient and modern. Limúrikè is the third, with its northern confine at Cape Ramas, and its ſouthern previous to Nelkunda; correſponding with Canara, which commences at the ſame point [54], and has its ſouthern limit at Deela. And laſtly, the kingdom of Pandíon as a fourth diviſion, equivalent to Malabar Proper, ſucceeded by Paralia and Cómari, and terminating with the Pearl Fiſhery and Ceylon. Let us, I ſay, contemplate

[54] Orme, Hiſt. Frag. p. 73.

this general picture of the whole coaſt, from the Indus to the ſouthern cape of the peninſula; a ſpace comprehending fourteen hundred miles, through the whole of which the ancient diviſions are found conſiſtent with thoſe of the preſent day; and we cannot, under all theſe circumſtances, fail to acknowledge the information of our author, and the importance of the work he has left for our inſtruction.

After this comprehenſive view, the contention which may ariſe about the appropriation of individual names to particular ports, towns, or ſtations, is a matter of very inferior conſideration: my conjectures or aſſertions may be diſputed as well as thoſe of others, who have trod the ſame ground; but till the great outline which I have traced can be obliterated, the ſervice rendered to the ſcience muſt be acknowledged.

Many of the gentlemen now in India are poſſeſſed of minds illuminated by education, and ſtimulated with a deſire of enlarging the bounds of ſcience, or aſſiſting the inquiries of literature: theſe, in their reſpective ſituations, muſt have acquired a local knowledge, which cannot be obtained by thoſe who draw their information from written evidence alone. To ſuch men as theſe I have made a conſtant appeal, and ſubmit the deductions I have traced to their correction; particular errors there may be, but by the general diviſion of the provinces, I leave a guide to all that may be diſpoſed to further theſe inquiries, and a rule for rectifying every thing in which I may have been miſtaken. Still the inveſtigation ſhould be made, not by thoſe, like Fra Paolino, who drew every thing to Malabar, becauſe he had reſided thirteen years in the province, but by men of enlarged mind and general information, qualified, like Capt. Wilford, with claſſical learning, and a knowledge of the native language;

guage; enabled to direct their view to ages past as well as present; and poſſeſſed of comprehenſive faculties, which can embrace the general ſtate of India, as well as the particular province in which they happen to have been employed. From men of this ſtamp I ſhall experience every indulgence; and if they ſhould acknowledge that light has been thrown upon one of the moſt obſcure objects of inquiry left for our diſcuſſion by the ancients, I ſhall reſt ſatisfied with the reſult of my labours.

IX. LIMÚRIKÈ.

How d'Anville could be perſuaded that this province was the repreſentative of Concan, is inexplicable; for Pliny, whom he chiefly follows, ſays expreſsly, that Muzíris was not on the Pirate Coaſt, but in its neighbourhood only; and the Pirate Coaſt is as clearly defined by all our ancient authorities, as by the modern accounts. Cape Ramas, as its northern boundary, and Nelkunda, in the territory of Pandíon, as its ſouthern limit, mark the confines ſo preciſely conſiſtent with Canara, that we cannot be miſtaken. Theſe likewiſe are the limits of the language [155] at the preſent day, which is a diſtinct dialect from that of Malabar on the ſouth, or the Mahratta language on the north; and this is a characteriſtic leſs fluctuating than any diviſion of the country that conqueſt might produce.

The ancient kingdom of Canara embraced a large part of the peninſula, the capital of which was Bejapoor [156]; but the modern

[155] La lingua Canara, che corre nel regno Canara dal monte d'Illy ſino a Goa. Paolino, p. 262.

[156] Commonly written Viziapoor. Several of the dialects have no v, and others no b; j and z are likewiſe perpetually interchanged or confounded.

diſtrict of that name was chiefly on the coaſt, with its capital above the Ghauts. It was an independent ſtate or kingdom, till it was reduced by Hyder Ali in 1765; and it was at that time governed by a queen [157], who had driven out the rajah, a child of nine years old, in favour of her brother. Under pretence of aſſiſting the deprived rajah, Hyder entered the country, laid ſiege to Bednoor and took it, and, in a very ſhort time after, ſent the queen with her brother, and the young rajah, into confinement in one of his hill forts near Bangaloor. Bednoor, the capital, is rendered famous by the defeat and death of the unfortunate General Matthews in 1783; and was conſidered by Tippoo Sultan as a fortreſs of ſufficient ſtrength to confide to it a very large portion of his treaſures. The conqueſt of Canara gave Hyder and his ſon a communication with the coaſt, and opened the way for farther incurſions to the ſouth, which were proſecuted to the devaſtation of Calicut and Cochin, and directed againſt Travancoor, when they were fortunately checked by the aſſiſtance of the Engliſh. Tippoo Sultan had likewiſe the ambition to become a maritime power: he built a frigate, and fitted out a fleet of the country veſſels of war, with which he undertook an expedition to the Maldives, and added to his titles, that of Lord of the Thouſand [158] Iſlands. Had he ſucceeded in his deſigns, he would have extended his dominions from Myſore to Cape Comorin, and extinguiſhed the laſt remains of Hindoo government in the peninſula, except the Mahrattas.

This ſhort recapitulation is not foreign to our ſubject; for though we hear much in hiſtory of the mild and gentle ſpirit of the Hindoos,

[157] It was regularly governed by a queen. C. Hamilton's Account of Eaſt Indies, vol. i. p. 279.

[158] The natives ſtyle their ſovereign, King of 12,000 Iſlands. Harris, vol. i. 677.

they

they were as much enamoured of conqueſt as the Mahomedans; and in the age of the Periplûs, a king of Mádura, (the ſovereign of [159]Pandi-Mándala, the Pandíon of the ancients,) had extended his power from the eaſtern to the weſtern ſide of the peninſula, and was maſter of Malabar when the fleets from Egypt firſt viſited the coaſt. The king [160] of Limúrikè, and the king of the country ſouth of that province, that is Pandíon, are ſaid both to have their reſidence inland by our author; and Pliny adds, that Pandíon lived *far* inland, at the city of Modúſa, which Ptolemy calls Modóora, the metropolis of Pandíon. The conjecture, perhaps, will not be admitted; but it ſeems as if the power of Pandíon had been ſuperſeded in Malabar, between the age of the Periplûs and Ptolemy; for Ptolemy reckons Aii next to Limúrikè on the ſouth, and takes no notice of Pandíon till he is paſt Cape Comorin, and comes actually to Mádura, on the eaſtern ſide of the peninſula. Not that his eaſt and weſt are on the two faces of the angle, for they are on a line; but he is relatively right, though eſſentially miſtaken.

In the limits of Limúrikè, Ptolemy is nearly in correſpondence with our author; for he commences with Tundis, omitting Naoora, and finiſhes with Bécare, which is cloſe to Nelkunda, and Nelkunda in both is the firſt port of Malabar. Ptolemy, indeed, preſerves many names more [161] than the Periplûs; for he ſeems, upon all occaſions, to inſert every name he could collect, and the merchant

[159] The natives, I am informed, ſtill diſtinguiſh themſelves by the name of Pandi or Pandoo.

[160] The king of Canara might live above the Ghauts, as well as the queen that Hyder deſtroyed by the capture of Bednore.

[161] Many more appear in Capt. Hamilton's account than we have occaſion to notice at preſent. C. Hamilton throughout conſiders Canara as the richeſt country of the coaſt; but plundered by the Mahrattas, Malabars, and Arabs. Such a work as the Oriental Navigator muſt notice every place; a merchant, only thoſe where he traded. This is exactly the difference between Ptolemy and the Periplûs.

ſpecifies

ſpecifies thoſe only that were frequented for the purpoſes of commerce. He has only three in this province—Naoora, Tundis, and Mooziris; all diſtinctly marked as ſubject to Kepróbotas, and in a different diſtrict from Nelkunda, which was in the kingdom of Pandíon.

It is remarkable, that not one of theſe three places is accompanied with any local circumſtances ſufficient to determine their poſition; but Moozíris is five hundred ſtadia ſouth of Tundis, and Nelkunda at the ſame diſtance ſouth from Mooziris. If therefore we could fix Nelkunda, though in a different province [162], we ought to meaſure back theſe twice five hundred ſtadia, as the only means of direction that we poſſeſs.

The following arrangement, therefore, I offer, with all the diffidence that the obſcurity of the Journal demands: I have perſuaded myſelf that it is correct; but I ſhould not be ſurprized if my deductions ſhould appear inconcluſive to others. I have followed the only clew I could diſcover; and if any one, who has paid attention to the ſubject, ſhould find better ground to ſtand on, I ſhall readily relinquiſh my own, and yield to ſuperior information.

For the poſition of Nelkunda, I am obliged to Major Rennell, who is the firſt geographer, as far as I have learnt, who has fixed it at Neliſuram. That he is correct in this, I am perſuaded, admits not of preſumptive proof only, but demonſtration:

For we may firſt obſerve, that Neliſuram is not only a mart itſelf, but gives name to a diſtrict. This diſtrict is not in Canara, but

[162] Nelliceram is in a different province, for the boundary wall is at Dekla. De la Rochette.—See alſo Capt. Hamilton, vol. i. p. 289. who makes Dccully, or Dekla, the limit.

Malabar:

Malabar: the frontier of Malabar, the boundary wall [163] which runs from the ſea to the foot of the Ghauts, is at Dekly, or Dekully, immediately north of Neliſuram. This wall is ſtill viſible; and this in a peculiar manner makes it correſpond with Nelkunda, which was the firſt port in the kingdom of Pandíon.

2. A ſecond proof may be derived from the name itſelf, which Orme writes Nellea-ſeram. Nella, according to Paolino [164], ſignifies *rice*, and Ceram a *country*; and if Nella-ceram be the country [165] of Nella, Nel-kunda muſt be the fort of Nella, reſembling Gol-conda, Inna-conda, or [166] Conda-poor, on this identical coaſt of Canara.

3. But the laſt and beſt teſtimony is that of Major Rennell himſelf [167], who mentions "a large river, named Cangerecora, whoſe "courſe is from the N. E. and which falls in about four miles to "the north of Mount Dilla; previous to which its courſe is parallel "to the ſea-coaſt for about eleven miles [168], being ſeparated only "by a ſpit of land. The forts of Neliſuram, Ramdilly, and Matte-"loy, are ſituated on this river, which is joined by ſeveral others "that deſcend from the Ghaut mountains, which in this part ap-"proach within twenty-two miles of the coaſt. I cannot help con-

[163] Orme. D'Anville, Antiq. de l'Inde, p. 112.—"The coaſt of Canara extends to "Declah, eight or nine leagues north of "Dilly." P. 220. 223. Oriental Navigator.

[164] P. 170.

[165] Batecola, between Onoor and Barceloor, has the ſame meaning. Bate or Pate rice—Colôu country. Voſſius ad Mel. lib. iii. 7.

[166] I have been treated with ſeverity by the Orientaliſts for encroaching on their province; but in India, every name of a place is ſignificant; and perhaps in every other country, if we could trace the language which firſt aſſigned them their reſpective titles. In this inſtance, however, the etymology is not mine, but deduced from an Oriental Grammarian, and I am only accountable for the deduction. I ought to add, that, according to his mode of interpretation, Coonda-poor is identically Caſtleton.

[167] Memoir, p. 28.

[168] Capt. Hamilton calls it a fine, deep river, which keeps its courſe along ſhore eight leagues, at a bow-ſhot diſtance. It diſembogues itſelf by the foot of Mount Delly, over rocks and ſands, in a channel half a league broad. Vol. i. p. 290.

"ſidering

" ſidering this Neliſuram, which is ſituated twelve miles up the " river, as the place meant by Nelcynda or Melcynda, by Pliny, and " Ptolemy—a place viſited by the Egyptian and Roman ſhips."

Let us then obſerve, that the Nelkunda of the Periplûs lies actually the ſame twelve miles up the river; and after this aſk, whether all theſe circumſtances can be accidental? for if the correſpondence is evident, it is but reaſonable to aſſume this proof as a demonſtration.

It is with the moſt anxious ſolicitude that I have concentrated all theſe peculiarities to a point; becauſe I ſhall want all the authority of ſo able a geographer, to ſupport the concluſion I ſhall draw from his premiſes; and though he ſupplies me with a baſis, I am not certain that he will be pleaſed with the ſuperſtructure I ſhall raiſe on his foundation; for, grant that Nelkunda is Neli-ceram (which from every kind of evidence I am perſuaded that it is), and it will immediately follow, that Onoor [169], Barceloor, and Mangaloor, are the

NAOORA, TUNDIS, AND MOOZIRIS, OF THE PERIPLÛS.

Theſe are the only places mentioned in Limúrikè; they are the principal places of Canara to this day. Naoora is the firſt port of Limúrikè, as Onoor is of Canara; and Mooziris [170] ſo preciſely the laſt,

[169] The Engliſh generally write and pronounce Onore, Mangalore, &c.; but Paolino ſays, *ur* ſignifies *borgo*, a town, and the Italian *ur* is the Engliſh *oor*.

[170] Coſmas informs us, that Mangaruth [Mangaloor] was, in the ſixth century, one of the principal ports for the exportation of pepper. The mention of this article is an acquiſition of evidence; but the aſcertaining the antiquity of the name, as far back as the ſixth century, is ſtill more in our favour. See Coſmas in Thevenot, p. 3. & Nova Collectio Patrum, in fine. Mangaloor is pronounced Mungloor by the natives, according to Capt. Moor, Narrative, p. 471. A and u are perpetually interchanged in Perſic and Arabic. Paolino informs us, that Mangul-ur ſignifies *the Town of Felicity*, and Mangula-puri, as it

is

laſt, that we have been obliged to encroach upon the ſucceeding province before we could diſcover it. But the diſcovery will be now complete; for the Periplûs places Moozíris fifty miles north of Nelkunda, Tundis fifty miles north of Moozíris, and, if we aſſume a third fifty north to Naoora, we have the whole three ports as preciſely as we can open the compaſſes. I requeſt the reader to refer this inquiry to the maps of Rennell, de la Rochette, d'Anville, or any other rather than my own, to remove all ſuſpicion of accommodation, and to aſſure himſelf of the certainty, not upon my aſſertion, but his own conviction. It is true that I am directed to Onoor, in ſome degree, by its ſimilarity in ſound to Naoora, but much more ſtrongly by conſidering that Naoora is the firſt port in Limúrikè, as Capt. Hamilton writes that "Onoar[171] is the north-"ernmoſt port of Canara." And if theſe three ports are eſtabliſhed by a reference to Nelkunda, ſome credit is due to a diſcuſſion which aſcertains the poſition of MOOZIRIS[172]; a point on which all are at a loſs, and no two geographers[173] fully agreed.

There is a river at each of theſe ports, and in them the whole trade of the country has in all ages been carried on. The former wealth of the province is ſtill evident, from the remains of tanks,

is ſometimes called, *the City of Felicity*: Tippoo changed it to Jumul-abad, *the Abode of Elegance*; and if future writers were to adopt the laſt change, Mangaloor might be hereafter as difficult to diſcover in Jumul-abad, as it has hitherto been in Moozíris.

[171] Vol. i. p. 275.

[172] The relative importance of Mangaloor, in modern times, qualifies it for Moozíris above any other place in Canara. "Mangalore is "the greateſt mart for trade in all the Canara "dominions: it has the conveniency of a ri-"ver, produced by three that come into it by "different ways, from the ſouth, the eaſt, and "the north . . . thoſe three rivers join about "a mile from the ſea, and at Mangulore "diſembogue at one mouth." Capt. Hamilton, vol. i. p. 282.

[173] Mooziris is fixed at Mirzeou by Rennell, at Vizindroog by d'Anville, at Calicut by Hardouin and Mercator, and left undetermined by Robertſon and Paolino.

pagodas, and public buildings, ſtill exiſting. Of Naoora [174], indeed, no particulars are mentioned except its name; but Tundis [175] is ſaid to be a village in the kingdom of Kepróbotas; Moozíris was under the ſame ſovereign; and here, it is added, that there was a great reſort of the native veſſels from Aríakè or Concan, as well as of the Greek fleets from Egypt. Another particular recorded is [that the coaſt was ſo near a right line] that whether you meaſured the diſtance between Tundis and Moozíris from river to river, or from the paſſage by ſea, the diſtance was equal. The ſame circumſtance is repeated in regard to the diſtance from Moozíris to Nelkunda: it is five hundred ſtadia, ſays our author, or fifty miles, whether you meaſure by land or ſea, or by the ſpace between the two rivers.

Pliny [176] does not mention a river at Moozíris, but obſerves, that it was no deſirable place of trade, not only on account of the pirates in the neighbourhood, but becauſe the ſhips rode at a diſtance from the ſhore in the open ſea, and boats were employed for the conveyance of their lading, both on the delivery and the reception. The merchants had therefore tried a more convenient port, called Necanydon, where they obtained pepper from a diſtrict called Cót-

[174] The text ſtands thus:

Εἶτα Νάουρα καὶ Τύνδις τὰ πρῶτα ἐμπόρια τῆς Λιμυρικῆς, καὶ μετὰ ταύτας Μούζιρις . . . . . βασιλείας δ' ἐστὶν ἡ μὲν Τύνδις Κηπροβότου . . . . ἡ δὲ Μούζιρις βασιλείας μὲν τῆς αὐτῆς . . . . κεῖται δὲ παρὰ ποταμὸν, ἀπέχουσα ἀπὸ μὲν Τύνδεως διὰ τοῦ ποταμοῦ, καὶ διὰ θαλάσσης, σταδίους πεντακοσίους, ἀπὸ δὲ τοῦ [ποταμοῦ] κατ' αὐτὴν ἴσους.

Where I inſert ποταμοῦ, Salmaſius reads ἐμπόρια; and he has placed Tundis at the mouth of the river of Moozíris; but where can we find a river navigable for fifty miles on this coaſt? which muſt be the caſe if Tundis is the road, and Mooziris the mart, fifty miles up the ſtream. Plin. Exer. p. 1185. Mooziris may eaſily lie two miles from the *river*. This meaſurement by the rivers induces Paolino to carry theſe three ports to the inlets between Calicut and Cochin. This ſuppoſition has ſome weight.

[175] D'Anville fixes Tundis at Dunda-Rajapoor in Concan.

[176] The text of Pliny is very corrupt. The expreſſion is, gentis Necanydon, the country of the Necanides; but the mention of Becare with it proves it to be Nelkunda.

tona. This is the pepper of Cottonára mentioned in the Periplûs, and aſſigned by every writer to the province of Canara. There is, upon the whole, no eſſential difference in the two accounts, except the mention of pirates by Pliny, not noticed in the Journal; but unleſs Hydras could be diſcovered, we cannot aſcertain their poſition: it is ſuppoſed to be the Nitria of Ptolemy, the laſt place upon his Pirate Coaſt; and though that is not *near* Mangaloor, doubtleſs the pirates roved on the coaſt of Canara in former ages, as they do now, and pirates there have been at d'Illi and the Angedive, as well as in Concan.

Moozíris is written Modíris, Moodíris, Moondíris, Zmiris, and Zymíris, by different authors, which might lead ſome inquirer, on the ſpot, to farther diſcovery. Both the Periplûs and Pliny certainly conſider it as an inferior port to Nelkunda; for no account of the imports or exports is given here, but at Nelkunda a copious catalogue. That Moozíris continued a place of reſort in later times, we may conclude from the Peutingerian Tables, which place there a temple of Auguſtus, that is, of the emperor of Rome; for at the date of the tables, in the time of Theodoſius, every emperor was Auguſtus; and that the Greeks or Romans ſhould have a temple here, is no more extraordinary than that the Chriſtians ſhould have churches in Travancoor, or that the Arabs ſhould have eſtabliſhed their ſuperſtition in Ceylon, which Pliny aſſures us was true.

Dodwell has built ſome arguments on this circumſtance, and on the names of the kings, which are the ſame in Ptolemy, Pliny, and the Periplûs, in order to bring down the date of this work to the time of Commodus and Verus. But Paolino affords a ſolution of this difficulty, which is perfectly ſatisfactory if his etymology be

true; for, he obſerves that Kepróbotas is written Celébothras and Ceróbothrus; and he informs us that Ceram ſignifies a *country*, *region*, or *province*, and botti, a *governor*; ſo that Cerambotti is as manifeſtly the *head* or *ſovereign* of a *province*, as Ceram-perumal is *king of the country*, compounded of Ceram, a *country*, perum [177] *great*, and aal *perſonage*, the great *perſonage* or ſovereign of the kingdom. And as Ceramperumal was the founder of the kingdom of Malabar in the year 907 [178] of our era, there is much probability in this interpretation. If this etymology be admitted, it accounts for the name of Ceróbothrus in Limúrikè, and that of Pandíon in Malabar, not only in the different ages of Pliny, Ptolemy, and our author, but for as long a period as theſe diviſions of the country continued undiſturbed; for Mádura is ſtill known in India as having the ancient title of Pandi Mándala, *the kingdom of Pandi*, or the Pandoos; and Pandavais the founder of the ſovereignty, according to the Bramins. Pliny [179] therefore was miſtaken, in aſſuming a general title for a proper name, as well as Ptolemy, and the author of the Periplûs.

X. KINGDOM OF PANDÍON, OR MALABAR.

THE native appellation of Malabar, we are informed by Paolino, is Kerula Ragiam, the Kingdom of Kerula, or Malayálam, the *Mountain Country*, derived from the Ghauts which bound it inland, and are viſible from a great diſtance at ſea. He adds, that Malan-

[177] Governor Duncan joins in this interpretation of Perumal. Aſ. Reſ. vol. v. It is a curious and valuable paper.

[178] There is another date 805. D'Anville, 114.

[179] Regnabat ibi, cum hæc proderem, Celebothras. Plin. vi. 23.

gara

gara is an Indian term corrupted into Malabar, and ought not to be deduced from the Arabic mala, a *mountain*, and bahr, a *coaſt*. It is not neceſſary to aſſent to this; becauſe, when the Europeans firſt viſited India, after the diſcovery of Gama, they derived their information from the Arabs, and conſequently adopted their terms. At that time Calicut was the grand mart of the Oriental world; for here the trade from China and Malacca met the Arabs and Perſians, who brought the produce of their own countries, as well as ſeveral articles which they procured from Europe; and though ſome Arabian veſſels penetrated to Malacca, or even China, and ſome Chineſe merchants, as it is ſaid, extended [180] their voyage to Arabia, or to Keiſh and Shiraff, in the Gulph of Perſia, the general point of intercourſe was Calicut. When the Portugueze reached the caſtern coaſt of Africa, they were directed neither to Surat or Baroache, but to this city; and here they found the Arabs ſettled in the country ſo powerful and numerous, as to obſtruct their commerce, and traverſe all the plans they had conceived. According to Barthema [181], there were not leſs than fifteen thouſand of them ſettled in this place only, beſides numerous bodies of them on the coaſt, in Ceylon, and in Coromandel.

The influence they had in the country may be calculated, not only from this inſtance, but from the revenue their commercial tranſactions produced; from their readineſs to engage in all the ſervices of war, policy, and government; from the ſpirit of adventure which appears in all their conduct; and above all, from the

[180] This opinion is founded on the report of Renaudot's Arabs, and will be conſidered hereafter.

[181] The evidence for their power and number is alſo very clear from M. Polo, and their employments in trade and war. See Lib. iii. Ceylon, and p. 54.

deſire

desire of extending their religion, as well as promoting their individual interest. The character under which Paolino describes them at the present hour, would probably have suited them in every age:—" They [182] are a robust race, wearing their beards long and " their hair neglected; their complexion is dark, and their cloth- " ing consists of nothing more than a shirt and trowsers of cotton. " They are active and laborious; seldom appearing in the streets " but in a body, and always armed. They sleep in tents or booths, " dress their victuals in the open air, and work, during the night, " by the light of the moon. They assist one another in lading and " unlading their ships, and they drink plentifully of toddy and " arrack. Upon receiving the least affront, the revenge is com- " mon to all." Their trade is still considerable [183] both at Cochin and Calicut; for not less than an hundred ships are employed in this trade, from Maskat, Moka, and Judda; and the commodities they purchase are of a better quality [184] than those obtained by the Europeans; because the Europeans, either by their power, or by contract, have bound the native government to furnish them with pepper and other articles at a regulated price.

The Chinese no longer frequented the port of Calicut when the Portugueze arrived in India: they had been ill-treated by the Zamorin, probably at the instigation of the Arabs, and for the same reason which excited their jealousy of the Europeans; and after a fruitless attempt to revenge themselves, the Chinese ships came no longer to Malabar [185], but to Maliapatam only in Narsinga, on the coast of Coromandel.

[182] Paolino, p. 84.

[183] Paolino says, they make two voyages in a year; but I do not understand how this can be, if they sail with the monsoon.

[184] Cæsar Frederick in Hackluit, p. 223.

[185] Barthema in Grynæus & Ramusio.

Now

Now this trade with the countries farther to the eaſt, and the intereſt which the Arabs had in the communication, is in full correſpondence with the account of Pliny [186] in the firſt century, with Ptolemy in the ſecond, with that of Coſmas in the ſixth, with the Journal of the Arabs (publiſhed by Renaudot) in the ninth, with the experience of Marco Polo in the thirteenth, and with Nicola di Conti, ſixty years previous to the arrival of the Portugueze in India.

It appears from Pliny, that the Arabs were ſo numerous in Ceylon, as to have occupied the country below the Ghauts, like the modern Europeans; for their ſuperſtition had prevailed over that of the natives on the coaſt. He adds, that the Seres [187] were known in that iſland by means of the intercourſe which commerce produced; and that the father of the rajah who came upon an embaſſy to Claudius, had been in their country. (Something like this will appear hereafter in the Periplûs.) And that a regular communication was open between India and Malacca, there can be no doubt; becauſe Ptolemy has fixed a port on the coaſt of Coromandel, from which the fleets ſailed which went to Chrusè, or the Golden Cherſoneſe. Here we may fix the limit of ancient geography; and whether we chuſe to carry this trade to China, as ſome have ſuppoſed from the name of Sinæ Thinæ, and Seres, or whether we fix it at the peninſula of Malacca, it is in effect the ſame; for in that peninſula there have been, in different ages, the kingdoms of Tonquin, Cochin China, Pegu, Siam, and Ava; all partaking of Chineſe manners, habits, and cuſtoms, and all furniſhing, in ſome degree, the commodities we now pro-

[186] Lib. vi. cap. 22.

[187] Pliny ſays, moreover, Seras ab ipſis aſpici; as if the coaſt of the Seres were in ſight. But Salmaſius propoſes reading, ultra montes Emodos Seras quoque ab ipſis aſpici, notos etiam commercio; meaning that the Ceyloneſe went by land into Tartary, and ſo to China.

cure

cure in China. How the report of theſe countries, indeterminate as it was, reached Greece ſo early as the age of Eratoſthenes.[188], is a great problem, not eaſy to reſolve; but that in later times ſome merchants had been induced, by intereſt or curioſity, either to attempt the voyage, or to ſail on board the native ſhips, is highly probable. That all knowledge, however, beyond Ceylon was doubtful and obſcure, is undeniable; for here the marvellous commences, which is conſtantly the attendant upon ignorance; and in whatever author it is found, we may be aſſured he has no certain information on which he can depend.

Within the limits of Ceylon all the general concerns of commerce were certainly confined, in the age when the Periplûs was written; and whatever might be the extended attempts of the Arabs, very few of the veſſels from Egypt ever reached that iſland. Nelkunda was the Calicut of their day; and ſtanding in the ſame country, and affording the ſame commodities, they procured here for the market of Alexandria the drugs, ſpices, and other precious commodities, which have ever been in requeſt throughout Europe.

At Nelkunda let us now pauſe, written Melênda [189] by Ptolemy, Melkunda by his commentators, Necanidon by Pliny, Neakyndon by Hardouin, and Nincilda in the Peutingerian [190] Tables. It is ſaid to

[188] If Eratoſthenes derived all his knowledge from Timoſthenes, as Marcian informs us; Timoſthenes, who was ſent down the coaſt of Africa by Philadelphus, muſt have acquired his information either there or from Arabia. But the Thinæ are mentioned in Ariſtotle's Treatiſe de Mundo; and if that work be really Ariſtotle's, it proves that the Golden Cherſoneſe had been heard of in the time of Alexander.

[189] D'Anville has found an Ophir in Arabia, connected with a Sefareh el Zinge on the coaſt of Africa, and a Sefareh el Hinde in India. Would not the ſame ſpeculation diſcover a Melinda on the coaſt of Africa, and a Melênda in Malabar?

[190] It is a very ſingular circumſtance, that the Peutingerian Tables ſhould have the ſame names as the Periplûs on this coaſt, but reverſe them; for as they run Tundis, Muzíris, Nelkunda, in the Journal, they ſtand Nelkunda, Tyndis, and Muzíris, in the Tables, with

to be the ſame as Becarè, by Pliny, and near Barákè, or Ela-Barákè, by the Periplûs. That is, Barákè is a village at the mouth of the river, which, joined with Ela, cannot fail to remind us of Eli, as it is written by Marco Polo [191], the d'Illi, or d'Illa, of our modern charts. D'Illi is one of the moſt conſpicuous points on the coaſt, and, as far as I can diſcover by the maps, the only remarkable mountain cloſe to the ſhore. This I had ſuppoſed to be called Mount Purrhus in the Journal; but if Purrhus is to be interpreted as a Greek term, it ſignifies the *Ruddy Mountain* [192]; and I have ſince learnt, that d'Illi has not this appearance, but that there are heights both to the north and ſouth, which ſtill bear the title of Red Cliffs, and which will be noticed in their proper place. The mouth of the Neliſuram river, or Cangerecora, at Ramdilli, is placed by Rennell almoſt cloſe to the mountain; and [193] Ram-d'Illi [194] again contains the name of Ela, and is manifeſtly the Ela-Barákè of the Journal.

At Barákè the veſſels rode till their lading was brought down from Nelkunda. It ſeems by the text as if the navigation of the river were ſafe, and that the ſhips went up to the city to deliver their cargo, and then came down to Barákè to receive their lading

with Blinka, a corrupt reading for the Elanki of Ptolemy, and Colchi Sindorum, for the Kolkhi of both. There is mention likewiſe of a temple of Auguſtus, or the Roman emperor, and a lake at Muzíris. Theſe circumſtances, however erroneouſly ſtated, ſtill tend to prove the continuance of this commerce, from the time of Claudius to Theodoſius—a ſpace of above three hundred years; and a probability that the Roman merchants had ſettled a factory at Muziris, as they would ſcarcely have built a temple there, without ſome ſort of reſidence in the country.

[191] It is written Eli, and d'Eli, in Bergeron's tranſlation; Deli, in Ramuſio.

[192] Τὸ Πυῤῥὸν Ὄρος.

[193] Ram is a common adjunct, ſignifying ; as, Ram-Rajah.

[194] D'Illi is the orthography of Paolino; Dilla, of Rennell; Deli, Dehli, and Delee, are found in different charts; and Eli, in Marco Polo.

in return; if ſo, it is a preſumption that they returned deeper laden than they arrived, as moſt veſſels from Europe do at the preſent day. But there is ſome confuſion in the text, and one corruption [195] at leaſt: in modern [196] accounts, the river itſelf is deſcribed as large and deep, but obſtructed at its mouth by ſhoals and ſand-banks. The approach to this coaſt likewiſe is diſcoverable, as well as that of Guzerat, by the appearance of ſnakes upon the ſurface of the ſea, which are black, ſhorter than thoſe before mentioned, more like ſerpents [197] about the head, and with eyes of the colour of blood. This is a circumſtance confirmed by Paolino, who lived thirteen years in the country, and who accounts for it by ſuppoſing that they are waſhed down by the rivers in the time of the rainy ſeaſon.

The port of Barákè, or Nelkunda, is much frequented on account of the pepper and betel which may be procured there in great quantities [198]. The principal Imports are,

Χρήματα πλεῖϛα, - -	Great quantities of ſpecie.
Χρυσόλιθα, - - -	Topazes.
Ἱματισμὸς ἁπλᾶς ϗ πολὺς, -	A ſmall aſſortment of plain Cloth.
Πολύμιτα, - - - -	Rich cloths, of different colours?
Στίμη, - - - -	Stibium for colouring the eyes.
Κοράλλιον, - - -	Coral.
Ὕαλος [199] ἀργὴ, - - -	White glaſs.
Χαλκὸς, - - - -	Braſs.

[195] Διὰ δὲ τῶν ποταμῶν αλματα καὶ διάπλους ἴχει ἀλαφράς. It does not appear what ought to be ſubſtituted for ἄλματα.

[196] In Capt. Hamilton; and it is remarkable that Marco Polo ſays, the ſhips of Mangi (China) that came here, loaded in eight days, or earlier, if they could, on account of the danger of the anchorage. Lib. iii. c. 26.

[197] Ὄφις . . . δρακοντειδεῖς τὴν κεφαλήν. What is the diſtinction between ὄφις and δράκων? It ſeems here, *creſted*.

[198] Διὰ τὸν ὄγκον καὶ τὸ πλῆθος τῦ πιπέρεως καὶ τῦ μαλάβαθρυ.

[199] Rendered by Hudſon, Vitreum rude; but ἀργὴ, *white*, is added to it, to diſtinguiſh it from vitrum in general, which was blue.

Κασσίτερος,

Κασσίτερος, - - -	Tin.
Μόλυβδος, - - - -	Lead.
Οἶνος ὰ πολὺς, - - -	A ſmall quantity of wine[200]; but as profitable as at Barugáza.
Σανδαράκη, - - -	Cinnabar.
Αρσενικόν, - - - -	Orpiment.
Σῖτος ὅσος ἀρκέσει τοῖς περὶ τὸ ναυκλήριον, - -	Corn, only for the uſe of the ſhip's company. The merchants do not ſell it.

The Exports are,

Πέπερι[201] μονογενῶς ἐν ἑνὶ τόπῳ τούτῳ γεννώμενον[202] πολὺ καὶ λεγόμενον Κοττοναρικόν, -	PEPPER, in great quantity, which grows only in this one place, and which is called the Pepper of Cottonara.
Μαργαρίτης ἱκανὸς καὶ διάφορος,	Pearls, in quantity and quality ſuperior to others.
Ἐλέφας, - - - -	Ivory.
Ὀθόνια Σηρικὰ, - - -	Fine ſilks.
Νάρδος[203] ἡ γαπανικὴ, - -	Gapanick ſpikenard: it is uſually read Gangetick.
Μαλάβαθρον, - - -	Betel.
ἐκ τῶν ἔσω τόπων,	from the countries farther to the eaſt.

[200] Σώσυ δὲ τοσοῦτον ὅσον ἐν Βαρυγάζοις. Hudſon has omitted this. The meaning here given is conjectural.

[201] Pepper, from the wealth it brings into the country, in Sanſcrit is called, *the Splendour of Cities*. Paolino, p. 356.

[202] I think γεννώμενον implies, the native growth of the country: it may ſignify only, procurable there.

[203] Νάρδος ἡ γαπανικὴ. There can be little doubt of the corruption here; becauſe, at p. 36. the author himſelf writes Γαγγιτικὴ Νάρδος, the ſpikenard procured at the Ganges; and there it is ſtill procurable from Thibet, according to Sir Wm. Jones and Dr. Roxburgh. Aſiatick Reſearches.

Λιθία διαφανῆς παντόια, -	All ſorts of tranſparent or precious ſtones.
Ἀδάμας, - - - -	Diamonds.
Ὑάκινθος, - - - -	Jacinths. Amethyſts.
Χελώνη[204] ἥτε Χρυσονησιωτικὴ καὶ ἡ περὶ τὰς νήσους θηρευομένη τὰς προκειμένας αὐτῆς τῆς Λιμυρικῆς, - - -	Tortoiſe-ſhell, from the Golden Iſlands (or Maldives?); and another ſort, which is taken in the iſlands which lie off the coaſt of Limúrikè (the Lackdives).

The particulars of theſe cargoes ſuggeſt ſome reflections of curioſity; for the bullion or ſpecie employed in the purchaſe of the native commodities, has formed a ſubject of complaint in all ages, as if Europe were exhauſted of the precious metals, and all the riches of the world abſorbed by Oriental commerce: the fact is true, that this trade cannot be carried on without bullion; for all the revenues of the country, now in the hands of the Eaſt India Company, are not ſufficient to cover the inveſtments annually made. Still Europe[205] is not exhauſted, but increaſing daily in wealth and power, compared with the other quarters of the world, and never can be, till the induſtry promoted by this commerce, and by commerce in general, ſhall be annihilated.

Tin is another of the articles enumerated; and if we find this produce of Britain conveyed to Malabar in the earlieſt period that hiſtory can reach, we find the ſpices of Malabar in Britain, in an age when the courſe of the communication with India was probably as little known as the exiſtence of America. The venerable

[204] Salmaſius ſuppoſes Χρυσονησιωτικὴ to refer to Khruſè, the Golden Iſland, or Cherſoneſe, in Ava.

[205] See Harris's Diſcourſes on the Eaſt India Trade, vol. i.

Bede

Bede [206], who died in the year 735, was poſſeſſed of pepper, cinnamon, and frankincenſe. Did no one ever aſk the queſtion, how, in that age, theſe luxuries had been conveyed to Britain, or were treaſured in a cell at Weirmouth?

But the particular moſt worthy of remark, is the mention of fine filks [ὀθόνια Σηρικὰ]; for othonion is any web of a fine fabric, and as applied to cotton ſignifies muſlin; but its uſage in this paſſage, joined with *Sericon*, plainly indicates the manufacture of the Seres, which is ſilk. It is mentioned only at this port, and particularly diſtinguiſhed as not being a native commodity, but brought hither from the countries farther [207] to the eaſt. This is a ſufficient proof that Nelkunda was in that age, what Calicut was in later times—the centrical mart between the countries eaſt and weſt of Cape Comorin; and we want no other evidence to prove, that the intercourſe between India and the countries beyond the Bay of Bengal, was open in that age, and probably many ages prior, as well as in the time of Ptolemy. That the fleets which went to Chrusè, or the Golden Cherſoneſe, would find the ſilks of China in that market, is readily admitted; but that the Seres were ſtill farther eaſt, is manifeſt, from the map of Ptolemy, as well as from Pliny, who calls them the moſt eaſtern nation of the world. Now that the ancients always meant China Proper by the term Seres, however obſcure their notions of it were, ſeems to admit of proof. Silk came into the Roman world uſually by the route of Tartary, the Caſpian, and the Euxine ſea; and when Juſtinian procured the ſilk-worm, he procured it by this northern channel. This communication however,

[206] Bedæ Opera, p. 793. Appendix, and p. 808. Alfred, who is ſaid to have ſent Sighelm, biſhop of Shirbourne, to Malabar, began to reign in 872.

[207] Φέρεται δὲ καὶ ἐκ τούτων τὰ ὀθόνια.

on the north, could not be opened with the nations of the Golden Cherſoneſe, with Ava, Pegu, or Siam, but is expreſsly marked as formed immediately with the Seres themſelves. The point fixed for the meeting of the traders from the weſt with thoſe of the Seres, was in Tartary, and farther to the [208] north-eaſt than the ſources of the Ganges; and this point, fix it where we pleaſe, is perfectly in correſpondence with the Kiachta of our own days, where the commodities of the Chineſe and Ruſſian empires are exchanged. The jealouſy of the Seres in regard to ſtrangers, remarked by Pliny [209], is perfectly characteriſtic of the Chineſe in all ages; and whether the communication took place near the Chineſe frontier, or in any place nearer to the weſt, it equally proves that there were Seres on the north, as well as the ſouth; and that there was one communication opened by the intervention of Tartary, and another by ſea, through the means of the nations in the Golden Cherſoneſe. We ſhall find ſome intimation of this commerce on the north (wild and fabulous as the account is) at the concluſion of the Periplûs, and in the catalogue of articles now under conſideration, the communication by ſea is equally manifeſt. Whether this intercourſe by ſea was direct, or only by the intervention of the nations of the Cherſoneſe, is another queſtion; but on this ſubject more will be ſaid in its proper place. It ſeems natural, however, to ſuppoſe, that there always was a Malacca, or ſome port that repreſented it, where the trade from China met the merchants from India; as the commerce of India met the traders of Arabia and Perſia at Calicut, or ſome port on the coaſt of Malabar. In this ſtate of things,

[208] Ptolemy, VIIth Table of Aſia.

[209] Pliny mentions this twice; lib. vi. c. 17. and cap. 2, 3. In the firſt, it is the communication by land; in the ſecond, it is from the information of a native of Ceylon.

the Portugueſe found the commerce of the Oriental world; and in a ſtate very ſimilar, it ſeems to have exiſted in the age of the Periplûs. This affords us a rational account of the introduction of ſilk [210] into Europe, both by land and ſea; and thus by tracing the commodities appropriate to particular nations, or climates, we obtain a clue to guide us through the intricacies of the obſcureſt ages.

One circumſtance reſpecting the Malábathrum, which I have ſuppoſed to be the Betel, remains ſtill to be conſidered: it is ſaid to be brought here from the countries farther [211] eaſt, and not to be a native commodity. Pepper, and pearls, and ivory, and ſpikenard [212], are likewiſe ſaid *to* [213] *be brought* here, as well as ſilk; all which contribute to prove this port to be the repreſentative of Calicut in that day, and Pandíon to have enjoyed all the revenues ariſing from the commerce of India and Europe. Could it then be proved that the hundred and twenty ſhips which Strabo ſaw [214] at Bereníkè, actually reached India by a coaſting voyage before the monſoon was diſcovered, we can ſee a reciprocity of intereſts, which might very eaſily induce Pandíon to ſend an embaſſy to Auguſtus. Another Indian embaſſy is ſaid, by Strabo, to have been ſent to the ſame emperor by Porus; and this Porus is ſuppoſed, in Indian hiſtory, to be the ſovereign of Agimere—the Rana, or principal of the Raj-

[210] Silk was not a native commodity or manufacture of India in the 16th century; it ſtill came from China. Cæſ. Frederick, Purchas, vol. iii p. 1708.

[211] Ἐκ τῶν ἔσω τόπων. Again, I have no doubt but that the ſenſe here given is the right one.

[212] The Areka nut is mentioned as an export at Cananoor, the next port by Cæſ. Frederick, p. 1707. Purchas, vol. iii.—a fruit the bigneſs of a nutmeg, which they eat with the leaf, called Betle. And lime of oyſter-ſhells, pepper, cardomum, and ginger, are alſo mentioned. Within land is the Kingdom of Pepper.

[213] Φερεται.

[214] Strabo, lib. xv. p. 686.

pout

pout [215] rajahs. Now, were it poſſible to connect his intereſts with thoſe of Guzerat, we might prove, that the trade carried on at Barugáza and Nelkunda was of ſuch importance, as to make an intercourſe neceſſary between theſe two Indian potentates and the emperor of Rome. If an Indian hiſtory of theſe early times ſhould ever be obtained that poſſeſſed a degree of conſiſtence or probability, ſome light might be thrown on this ſubject; at preſent it is mere conjecture and ſpeculation.

I cannot quit the contemplation of this catalogue, however, without adverting to the laſt article on the liſt, which is the tortoiſe-ſhell procured from the Golden Iſles, and the iſles that lie off the coaſt of Limúrikè. The firſt, if not the Maldives, are Khrusè; but the latter are the Lackdives: both are ſtill famous for producing the beſt tortoiſe-ſhell, and particularly the black ſort [216], the fineſt in the world, which is found only here, or at the Philippines, and obtains an higher price than any that is procured elſewhere. But if the Maldives are dubious, the Lackdives do actually lie off the coaſt of Canara or Limúrikè; for though the bulk of them is to the ſouthward, the [217] northernmoſt of the group is nearly in the latitude of Mangaloor; and the market where the tortoiſe-ſhell was procured, was Nelkunda. This one circumſtance might have convinced d'Anville, if he had attended to it, that Limúrikè muſt be Canara, and could not correſpond with Concan; for there are no iſlands on that coaſt, where any quantity of tortoiſe-ſhell could be obtained, ſufficient to be conſidered as an article of general commerce.

[215] Rennell's Mem. laſt ed. p 230.

[216] Harris, vol. i. p. 716. Purchas, vol. iii. 1566.

[217] See Rennell's corrected Map, and d'Anville's.

This

This extent and value of the cargoes at Nelkunda, either carried out or brought home, is of greater amount than we have found at any other port, and more circumſtantial than at any other except Barugáza. This appears correſpondent to the courſe of the trade at preſent, but ſtill more to the early commerce of the Engliſh, when their original factories were at Surat and Tellicheri. At Surat they obtained muſlins, chintz, and cottons; and at Tellicheri, pepper and cardamums: for though the Portugueſe multiplied their forts and ſettlements, the different productions of the north and ſouth, on this weſtern coaſt of the peninſula, were obtainable with ſufficient facility at theſe two points. In conformity with this ſyſtem we find, that throughout the whole which the Periplûs mentions of India, we have a catalogue of the imports and exports only at the two ports of Barugáza and Nelkunda, and there ſeems to be a diſtinction fixed between the articles appropriate to each. Fine muſlins, and ordinary cottons, are the principal commodities of the firſt; tortoiſe-ſhell, pearls, precious ſtones, ſilks, and above all, pepper [218], ſeem to have been procurable only at the latter. This pepper is ſaid to be brought to this port from Cottonara, generally ſuppoſed to be the province of Canara [219], in the neighbourhood of Nelkunda, and famous [220] to this hour for producing the beſt pepper [221] in the world, except that of Sumatra.

The

[218] The long pepper mentioned at Barugáza is an ordinary and inferior ſpice, more hot and pungent, with leſs flavour.

[219] Eli, Deli, or d'Illi, was the port frequented by the Chineſe for pepper in M. Polo's time. Lib. iii. c. 26.

[220] In the Sunda Rajah's country, adjoining to Canara, is the beſt pepper in India. Capt. Hamilton's Acc. of E. India, vol. iii. p. 260.

[221] Al Edriſſi mentions pepper as growing only in Culam-meli (an iſland below Subara), and at Candaria, and Gerabtan. What Gerabtan is, I know not; but Candaria may mean the kingdom of Canara, p. 61.; becauſe he ſays afterwards, it is near the mouth of a river in Manibar—Malabar, p. 65.; but it is not preciſe. Al Edriſſi derives this from the Arabs of Renaudot, p. 9. p. 16. where it is written Kaucam-mali, and Kamkam; the ſame as

The pre-eminence of theſe two ports will account for the little which is ſaid of the others by the author, and why he has left us ſo few characters by which we may diſtinguiſh one from another, ſo as to aſſign them proper poſitions on the coaſt. They ſeem to have been little viſited for the purpoſes of commerce; and if they were touched at only from neceſſity, the ſtay there was ſhort, and the obſervations tranſient; but the diſtinction of the provinces is clear, and if it has been found poſſible to give theſe from the teſtimony of our author, with ſo much preciſion as to prevent future deception, we ſhall not hereafter ſee the ſame place aſſigned to Guzerat by one author, and to Malabar by another; one of whom muſt be in an error of ſeven hundred miles. In limiting the provinces, and marking a few of the principal marts, all has been done that could be expected by thoſe who are acquainted with the work; and if conjecture has never been reſorted to, but where proof was unattainable, blame ought not to attach, becauſe the diſcuſſion of impoſſibilities has been declined. I have ſaid that it was dubious whether the author himſelf had ever been farther than Barugáza; but ſo many corroborating circumſtances have come out in tracing the account of Nelkunda, that I would now rather fix the limit of his voyage at this port. Farther than Ceylon he *certainly* was not; and whether the fleets from Egypt ever reached that iſland previous to the embaſſy from the king of that country to Claudius, is highly problematical. Individuals poſſibly might have been there upon an adventure, but the amplifications of Pliny and Ptolemy manifeſtly

Kemkem, or Concam; and Kaucam-mali is therefore Concan of Mala-bar, adopting Malabar for the whole coaſt, as is ſtill in uſage. But if Al Edriſſi has not copied from others, Culam-mali is Coulan of Malabar; and Coulan is ſtill a port of Travancore, where pepper is obtained. His ſtyling this an iſland, is conſiſtent with the uſage of Arabian writers.—M. Polo mentions Coulam, or Covalam, with the ſame pre-eminence. See infra.

beſpeak

beſpeak an ignorance of the truth in their age; and if the voyage was not regularly performed, the knowledge of individuals was either not reported, or not believed.

XI. HIPPALUS AND THE MONSOON.

THERE is an additional reaſon for believing that the regular courſe of trade terminated at Nelkunda, which is, the introduction of the diſcovery of the monſoon by Hippalus at this place. And for this place I have reſerved the diſcuſſion of that ſubject, becauſe, though I ſhall continue my inquiries as far as Ceylon, I am perſuaded that the author of the Periplûs went no farther than this port.

The hiſtory of this I ſhall give as nearly as poſſible in the words of the author:

" The whole navigation, ſuch as it has been deſcribed from " Aden[222] and Kanè [to the ports of India], was performed formerly " in ſmall veſſels, by adhering to the ſhore, and following the in- " dentures of the coaſt; but Hippalus was the pilot who firſt diſco- " vered the direct courſe acroſs the ocean, by obſerving the poſition " of the ports, and the general appearance[223] of the ſea; for at the " ſeaſon when the annual winds, peculiar to our climate[224], ſettle " in

[222] Arabia Felix.

[223] Σχῆμα.

[224] Ἀφ' ὃ καὶ τοπικῶς ἐκ τῆ Ὠκεανῆ φυσώντων τῶν κατὰ καιρὸν τῶν παρ' ἡμῖν Ἐτησίων, ἐν τῷ Ἰνδικῷ Πελάγει Λιβόνοτος φαίνεται.

Some doubt will remain whether this paſſage is accurately rendered; for the antecedent to ἀφ' ὃ is not clear; and the term Ὠκεανῆ may be thought improperly applied to the Mediterranean; but it ſeems uſed in oppoſition to Πελάγει, and by being joined with the Eteſians that blow [παρ' ἡμῖν] in *our* country, all ambiguity is removed. I will not vouch for the Greek of our author, in the uſage of Ὠκεανῆ, becauſe I think his language frequently incorrect, or his text corrupt; but the general ſenſe of the paſſage is ſufficiently clear. The Eteſian winds blow during the ſummer months in Egypt; and the ſouth-weſterly monſoon, in the Indian Ocean, is in its full vigour during

" in the north, and blow for a continuance upon our coaſt from
" the Mediterranean; in the Indian Ocean the wind is conſtantly
" to the ſouth-weſt; and this wind has in thoſe ſeas obtained the
" name of Hippalus, from the pilot who firſt attempted the paſſage
" by means of it to the Eaſt.

" From the period of that diſcovery to the preſent time, veſſels
" bound to India take their departure, either from Kanè on the
" Arabian, or from Cape Arômata [Gardefan] on the African ſide.
" From theſe points they ſtretch out into the open ſea at once,
" leaving all the windings of the gulphs and bays at a diſtance, and
" make directly for their ſeveral deſtinations on the coaſt of India.
" Thoſe [225] that are intended for Limúrikè waiting [226] ſome time
" before they ſail; but thoſe that are deſtined for Barugáza or
" Scindi, ſeldom more than three days."

This account naturally excites a curioſity in the mind to inquire, how it ſhould happen, that the Monſoons ſhould have been noticed by Nearchus, and that from the time of his voyage, for three hun-

ing June, July, Auguſt, and September. If then we ſuppoſe the author to be a native, or a reſident at Alexandria, the Eteſians παρ' ἡμῖν, repreſent the effect of them where WE live, and τοπικῶς φυσώντων, the blowing of the winds which WE locally experience. I render ἀφ' ὅ from the time or ſeaſon, common both to the Eteſians and Monſoons; and I do not join φαίνεται to προσονομαζεσθαι, with Salmaſius, though I ſuppoſe that a connecting particle is wanting. See Plin. Exercit. 1186.

[225] Καὶ τὸ λοιπὸν παριπιφέρον πρὸς ἴδιον δρόμον, ἐκ τῆς χώρας ὑφηλοὶ διὰ τῆς ἔξωθεν γῆς παραπλέουσι τὰς προειρημένας κώλπους.

The general ſenſe of this paſſage is clear; for ὑφηλοι, and ἐφ' ὑφῆς, are uſed by this author to expreſs ſailing in the open ſea; but how to underſtand διὰ τῆς ἔξωθεν γῆς is dubious. —Hudſon renders it, ex regione excelſi per terram externam ſupradictos ſinus prætervehuntur; where *per terram externam* is quite as unintelligible as διὰ τῆς ἔξωθεν γῆς, and *ex regione excelſi* certainly does not expreſs the meaning of the author.

[226] Τραχηλίζοντες, if it be not a corruption, has no ſenſe in the lexicons which can apply to this paſſage. The meaning by the context is plain; but how to elicite it from this word, I know not. Hudſon has very wiſely omitted it.

A learned friend renders Τραχηλίζοντες, *with their heads to the ſea*; ready to ſail, but not ſailing.

dred

dred years, no one ſhould have attempted a direct courſe, till Hippalus ventured to commit himſelf to the ocean. It has been ſufficiently proved, that a communication was open between India and Arabia previous to the age of Alexander; and it is impoſſible to conceive, that thoſe who lived either in India or Arabia, ſhould not have obſerved the regular change of ſeaſons and of winds, which recurred every year, and of which, if they were mariners, they could not fail to have taken advantage, every voyage they performed. It is likewiſe certain, that veſſels frequenting either coaſt would accidentally be caught by either monſoon, and driven acroſs the open ſea to the oppoſite ſhore, if they happened to be a few days too early, or too late, in the ſeaſon, for the voyage in which they were engaged. That this had happened, and that there was a direct paſſage by the monſoons in uſe between the oppoſite continents before the Greeks adopted it, has already been noticed from the Periplûs, and fully proved. But in almoſt all diſcoveries, the previous obſtacle is minute, and the removal of it accidental: thus it is, we may ſuppoſe, that the few veſſels which did find their way to India from the ports of Egypt by adhering to the coaſt, from the beginning, ſailed with the monſoon, both outward and homeward bound; but ſtill followed the track which had been pointed out by Nearchus; and it was neceſſary for an Hippalus to ariſe, before it ſhould be known, that the winds were as regular and determinate in the open ſea, as upon the coaſt. The Periplûs aſſigns the merit of the diſcovery to the obſervation of Hippalus himſelf; but there is nothing unreaſonable in ſuppoſing, that if he frequented theſe ſeas as a pilot or a merchant, he had met with Indian or Arabian traders, who made their voyages in a more compendious manner

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than the Greeks; and that he collected information from them, which he had both the prudence and courage to adopt. Columbus owed much to his own nautical experience and fortitude; but he was not without obligations to the Portugueſe alſo, who had been reſolving the great problems in the art of navigation, for almoſt a century previous to his expedition.

But the diſcovery of the monſoon once made, could never afterwards be neglected; and the uſe made of it by the fleets from Egypt is fully detailed, and much in the ſame manner by Pliny and the Periplûs. The courſe of the trade from Alexandria to Bereníkè, and the progreſs of the voyage from Bereníkè to Okêlis and Kanè, have already been ſufficiently deſcribed [227]; but there are ſome farther circumſtances connected with this, which cannot be ſuppreſſed without prejudice to the object in view. For Okêlis is mentioned by both authors [228] as the better port to remain at; which is evidently conſiſtent, becauſe it is ſheltered from the adverſe [229] monſoon; and the paſſage of thirty days to Okêlis, and forty to the coaſt of India, is a proportion ſo ſtriking, that it could be derived from no other ſource but evidence of the moſt authentic nature. For the firſt diſtance is only about four hundred and eighty miles, and the ſecond near nineteen hundred, and yet that there ſhould be only ten days difference in the longer part of the voyage, is peculiarly appropriate to the two different ſeas in which the navigation was to be per-

[227] P. 70. et ſeq.

[228] Plin. lib. vi. c. 23.

[229] The Immaum finding Aden to lie inconvenient for the trade of the Red Sea, becauſe of the freſh winds uſually blowing at its mouth in both eaſterly and weſterly monſoons, made him remove the trade about 15 leagues within its mouth, to a fiſhing-town called Mocha. Capt. Hamilton's Acc. of the E. Indies, vol. i. p. 19. That is, it is ſafer riding within the ſtraits than without.

formed.

formed. The veſſels deſtined for India left Bereníkè about the middle of July, or earlier, if they were to go farther than Barugáza. The paſſage down the gulph was tedious; for though the wind was favourable, the ſhoals, iſlands, and rocks, in their courſe, required caution, and compelled them to anchor every night; but when the ſtraits were paſſed, and a veſſel was once within the influence of the monſoon, ſhe had nothing to impede her courſe from Babel-mandeb to Guzerat; conſequently, forty days allotted to her paſſage is neither diſproportionate to her courſe down the Red Sea, nor too ſhort[230] a ſpace for performing a voyage of nineteen hundred miles to India, notwithſtanding the ſame run at preſent ſeldom exceeds fifteen. It ſeems at firſt ſight a contradiction, that veſſels which were to have the longer voyage to Malabar, ſhould remain longer at Okêlis than thoſe which were deſtined only for Scindi or Guzerat; but this likewiſe depends upon a circumſtance peculiar to the monſoon upon the coaſt of India, which appears never to have been noticed by thoſe who have undertaken to comment on the Periplûs.

It is ſufficiently known, that the commencement and termination of the two different monſoons are ſubject to conſiderable fluctuation; ſo that though we ſay theſe winds are alternate, ſix months each way, we ought to ſubſtract one month from the beginning and ending of each, which are not only fluctuating, but tempeſtuous. If then we examine the ſouth-weſterly or ſummer monſoon[231] in this reſpect, and conſider May as the month in which it commences,

[230] Nineteen hundred miles in forty days, gives rather more than forty-ſeven miles a day; but the day's ſail of an ancient veſſel was 500 ſtadia, or fifty miles; and the courſe of a νυχθήμερον double: ſo that they muſt in this paſſage have ſailed with great caution. But the Arabs, in the ninth century, employed thirty days from Maſkat; whence we may conclude, they had not much improved upon the Greeks. See the Arabs of Renaudot.—This run ſhould properly be taken at Gardefan.

[231] The whole of this is from the Oriental Navigator, p. 211.

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it is not finally ſettled till the beginning of June, a little earlier or later, according to the full or change of the moon [232]; and ſtill it is to be obſerved, that during June and July "the weather is ſo bad, "that navigation is in ſome degree impracticable." In Auguſt it is more moderate, and in September the weather is ſtill fairer; and though there may be an apprehenſion of ſtorms, "you have often "fair weather for ſeveral days together," which continues, though liable to the ſame interruptions, till the middle of October.

This is the peculiar circumſtance appropriate to the navigation of the ancients; for if we ſuppoſe a veſſel to leave Bereníkè on the 10th of July, and to arrive at Okêlis the 9th of Auguſt; after continuing there a week, ten days, or a fortnight, ſhe will reach Muzíris or Nelkunda, at lateſt, on the 1ſt of October; that is, at the very time when ſhe has reaſon to expect the beſt weather of the ſeaſon.

There is another ſingularity applicable to thoſe veſſels which are deſtined for Scindi and Barugáza, and which ſtay only three days at Okêlis or Cape Gardefan; this is, that the ſouth-weſt monſoon ſets in "earlier to the northward of Surat," than on the coaſt to the ſouthward. Whether this circumſtance is connected with their voyage, we have no data to determine; but if the monſoon commences here earlier, it is conſequently ſettled earlier than in Malabar.

After thus conducting our fleet to the ſhores of India, it remains next to conſider their voyage homeward-bound. And here we are informed by Pliny [233], that they continued on the coaſt from the latter end of September, or beginning of October, to the early part

[232] The firſt new moon in September is called St. Anthony's Moon, and conſidered as the commencement of the N.E. monſoon.—C. Hamilton, vol. i. p. 255.

[233] Lib. vi. c. 23.

of

of Tybi, or December. This allows two months, at leaſt, for the diſpoſal of their cargo, and taking in their lading in exchange. But the lateſt time of leaving the coaſt is within the firſt ſix days of Machiris; that is, before the ides of January, or the 13th of that month. Now it is very remarkable, that the original order for the fleets of Portugal was ſubject to the ſame regulation; for if they did not ſail before the 8th [234] of December, they were detained till the firſt week of the ſucceeding month. The reaſon for this, though not mentioned, is doubtleſs the change of the moon in both inſtances, at which time there are uſually ſome ſtronger gales; and in this we have one more evidence of the ſame operations of nature producing the ſame effects in all ages.

Pliny ſtyles the ſouth-weſt monſoon, Favonius (which the Periplûs calls Libo-Notus), and the north-eaſt, Vulturnus; about which there is much learned diſquiſition in Salmaſius. But we are now too well acquainted with theſe ſeas, to have a doubt remaining on the winds that were intended; and we conclude, that as the ſame cauſes have operated in all ages, they blew two thouſand years ago as they blow at the preſent day. Not that they are fixed to a ſingle point of the compaſs, but that north-eaſt and ſouth-weſt are their general direction. It is added by Pliny, that upon reaching the Red Sea, they found a ſouth or ſouth-weſt wind, which conveyed them to Bereníkè, and enabled them to conclude their voyage in leſs than the compaſs of a year. This, likewiſe, is conſiſtent with experience; for the winds in the Gulph of Arabia are almoſt conſtantly north and north-weſt, except for fifty days, when they are called the Gumſeen [235] winds, and prevail from the middle of March;

[234] Cæſar Frederick in Purchas, iii. p. 1708. who likewiſe mentions their arrival in September.

[235] Written Khâmſin.

during that period coming regularly from the ſouth. If therefore we ſuppoſe a veſſel to leave the coaſt of India between the 8th and 13th of January, forty days employed upon her return would bring her to Kanè, Aden, or Gardefan, towards the end of February. At any of theſe ports ſhe might wait, ſo as to be prepared to take advantage of the Gumſeen wind in the middle of March; and when ſhe was once within the ſtraits, this wind would ſerve her for fifty days to convey her to Bereníkè, to Myos Hormus, or even to Arſinoè, the repreſentative of the modern Suez. Thus, by embracing the opportunities which the regular ſeaſons in the different ſeas afford, the whole voyage outward and homeward-bound would be performed with a wind conſtantly in her favour.

The next point to be conſidered is, the departure of this fleet from Okêlis, Kanè, or Cape Arômata. The two laſt are more particularly intimated by the Periplûs; and Syagros, or Fartaque, by Pliny [216]. In this the merchant is moſt probably the more correct of the two; for, as we may conclude that he performed the voyage himſelf, ſo is Arômata, or Cape Gardefan, the point that divides the limit of the monſoon on the coaſt of Africa: for, on the authority of Beaulieu, we learn, that he paſſed from winter, ſtorm, and tempeſt, to calm and ſummer, in an inſtant, on doubling this promontory. Here then was the point where their courſe was open before them, from one continent to the other; and when they were once at ſea, there was nothing to change the direction of the wind till they reached the ſhores of India. On their return from India, they ran down their longitude firſt to the coaſt of Africa, tending to an

[216] Pliny ſays, it was 1333 miles from Syagros to Patala; which is not very diſtant from truth, for it is in a right line near 1200 miles.

object of magnitude which they could not miſs or overrun; and then made good their latitude by coming up northward to the coaſt of Barbaria and the Red Sea. In effecting this we may conclude, that they directed their courſe, as nearly as they could calculate, to Arômata; but Ptolemy informs us, they ſometimes got to the ſouthward of it, and were carried much lower down than they wiſhed; and ſometimes we know that they came intentionally to Rhapta, Opône, and other marts on the coaſt of Africa, and proceeded afterwards to Arabia, or the Red Sea, according to their deſtination, intereſt, or convenience.

The commerce of the Arabians has arreſted our attention throughout the whole progreſs of our inquiry, from the firſt mention of their imports in ſcripture, to the accounts of the preſent day. Their connections with the countries in their neighbourhood is equally obvious: in Syria, Paleſtine, Egypt, Perſis, Meſopotamia, and on the Tigris, we find them noticed by Pliny [217]; in India, by Agatharchides, and almoſt every ſubſequent geographer; in Africa, they are ſpread at this day from the Red Sea acroſs the whole continent to Senegal; and in the Eaſtern Ocean they are found upon every coaſt, and almoſt upon every iſland. But general as the extenſion of their name and nation may have been, when we refer to their own accounts, nothing is more obſcure [218]—nothing leſs ſatisfactory. The information to be collected from the little tract of the Periplûs is a picture of geography, in compariſon of the two Arabian narratives publiſhed by Renaudot, of Ebn Haukal, or Al Edriſſi; beſides all the fabulous and the marvellous which we have to remove. Still

[217] Lib. xii. 17.

[218] They are obſcure, not only from the want of longitude, latitude, and the direction of the coaſts, but likewiſe from their adopting names that are neither native or claſſical, but terms of their own language and uſage.

there are ſome particulars in theſe authors already noticed, which are worthy of attention; and ſomething in the Arabians of Renaudot peculiarly connected with the object of our inquiry; for the general fact, that the Indian commerce had ſettled at Siraf in the ninth century, is a revolution of importance.

Siraf[239] is upon the ſame coaſt in the Gulph of Perſia as the modern Gomroon, and held the ſame rank at that time as Keiſh in the thirteenth century, and Ormus of a later date. The merchants of Siraf, in that age, evidently performed the voyage to China, and Chineſe ſhips are mentioned at Siraf; but a cloſer examination has induced me to believe[240] that they were not Chineſe, but veſſels employed by the Siraf merchants in the trade to China. The trade from this port, however it extended farther to the eaſt, certainly met the Chineſe fleets on the coaſt of Malabar; for there it is mentioned, that the Chineſe paid a duty of a thouſand[241] drams, while other veſſels paid no more than from one dinar to ten.

But the ſhips that ſailed from Siraf went firſt to Maſcat in Arabia, for the ſame reaſon that the fleets from Egypt took their departure from Kanè and Arômata; that is, becauſe they obtained the monſoon the moment they were under ſail. The Arab has fortunately preſerved this circumſtance; for he ſays, "from Maſcat to Kaucam-

[239] It is written Shiraff, Sharraf, and, by M'Cluer, Charrack, pronounced Sharrack.

[240] In the port of London, a China ſhip is a ſhip deſtined for China; and in this ſenſe, perhaps, the Arab ſays, that moſt of the Chineſe ſhips take in their cargo at Siraf. He deſcribes their paſſage down the gulph to Maſcat; and upon mentioning the ſtraits at Muſſendon, he adds, "after we are clear of theſe rocks, we "ſteer for Oman and Maſcat." I conclude from this, that the narrator actually ſailed himſelf on board a Siraf ſhip for China, and in that ſenſe called it a Chineſe ſhip. P. 8. Engl. ed. I do not, however, think this proof ſo concluſive, as utterly to deny the navigation of the Chineſe weſt of Malabar.

[241] Two Arabs. P. 9. Eng. ed. The ſum is too ſmall to be credible; 10,000 dinars are equal to 1*l.* 1*s.* 6*d.* De Sacy, p. 332.

"mali

" mali is a month's [242] ſail, *with the wind aft.*" Here then we have an evidence of the monſoon, and of the paſſage direct from one coaſt to the other, in harmony with the Periplûs: we have a paſſage of thirty days from Maſcat, proportionate to the forty days from Gardefan; and whatever Kaucam may be, we find in Mali a reference to Malè and Malabar, in which we cannot be miſtaken. Al Edriſſi, who copies this paſſage from the Arabs, writes the name [243] Kulammeli; ſo that between the two authorities we may poſſibly diſcover Kulam on the coaſt of Malabar; and on that coaſt, in the kingdom of Travancore, there is ſtill the port of Coulan, about eighty miles below Cochin; and another Coulam [244], or Coualam, to the eaſtward of Cape Comorin. Either of theſe may be the port intended by the Arabian Journal, as it informs us, that " after watering here, you " begin to enter the ſea of Harkand," that is, the ocean to the ſouth of Comorin; and in another paſſage it is added, that " Kaucam is " almoſt upon the ſkirts of the ſea of Harkand."

I am not certain that I can follow my author farther; but if I underſtand him right, it is ſufficiently evident, that though they ſailed by the monſoon to Cape Comorin, they did not croſs the Bay of Bengal by the ſame wind; but after rounding Ceylon, or paſſing

[242] The Arabs had not much improved upon the Greeks in the art of Navigation.

[243] The difference of Kaucam and Kulam may be reconciled by ſuppoſing the tranſlators miſled by the want of the diacritical points; a difficulty which occurs to all tranſlators in rendering proper names. Compare the Arabian Journal, p. 9. with Al Edriſſi, p. 61. and p. 37. where Culam-meli is characterized as the Iſland (that is, the country) which produces pepper. Half the iſlands of the Arabian geographers are upon the continent.—Compare it alſo with Abulfeda, who calls it Caulam, the laſt port of India, where pepper is procured. Lat. 8. Melch. Thevenot, vol. i. p. 22.

[244] This other Coulam, or Covalam, beyond Cape Comorin, is in the country of Tinevelli; but Paolino ſays, the firſt Coulan ought to be written Collam. P. 75.—The trade continued at Coulam in Marco Polo's time. See lib. iii. c. 25.

the

the ſtraits of Manar, they ſtood on by Lajabalus[245] and Calabar (which is the coaſt of Coromandel), and Betuma (the ſame as Beit Thuma), St. Thomè or Meliapoor; and then by Kadrange and Senef to Sandarfulat, which ought to be the Straits of Malacca; and thence to China. There ſeems to be more coaſting in this voyage than in that of Ptolemy; for he carries his fleets acroſs from ſome point in the Carnatic to the Golden Cherſoneſe, at once. But if his communication terminated there, the Arabs went farther eaſt than his Sinus Magnus, and reached Canfu[246] in China, which is the modern Canton, where they traded much under the ſame reſtrictions which Europeans experience at the preſent hour. After all, they confeſs that very few of their ſhips reached China; that the voyage was extremely dangerous[247], and that water-ſpouts and tuffons were continually to be dreaded; added to which, at the date of their narrative in 867 of our era, the kingdom of China itſelf was diſtracted by internal commotions[248], which made it no longer ſafe for merchants to venture into the country.

[245] It is written Najabalus alſo, which d'Anville reads Nachabal for Nichobar. But the iſlands of Arabian writers are frequently not iſlands; and if the navigator went firſt to the Nicobars, and then back to the coaſt of Coromandel, he almoſt doubled the paſſage acroſs the bay. Calabar, I ſuppoſe, ſtands in contraſt to Malabar, commencing poſſibly at Calymere. Bet Thuma is the houſe or church of St. Thomas at Meliapoor, near Madras: Kadrange and Senef, I cannot diſcover; but Senef I ſuppoſe to be the Sanf of Al Edriſſi, which, he ſays, is ten days from Sandifalat; and Kadrange may be Arracan. Sandifalat can hardly be any thing elſe but the Straits of Malacca; but Renaudot reads it Sandar-Pulo, and converts it into Pulo-Condor, which ſeems fanciful. It might be a ſubject of inquiry, whether Senef, Sanf, or Samf, may not be Siam. The ſea oppoſite the coaſt of Coromandel is called *Mare Sanficum*, which may be the ſea of Siam; but Siam extends acroſs the peninſula, and the gulph of Siam *Proper* is on the eaſtern ſide. Al Edriſſi, p. 34.

[246] Canfu is the Chaneeu of Al Edriſſi. P. 37.

[247] Between the ſea of Harkand and Delarowi there are 1900 iſlands (Arabs of Renaudot), which include the Maldives, Sarandiv, and Ceylon, in the ſea of Harkand. Arabs 2. Al Edriſſi, p. 31. The danger of the voyage was increaſed by theſe, as much as by the obſtacles farther eaſt.

[248] The wars which preceded the dynaſty of Sunga. Arabs, p. 41. remarks, 47.

But

But ſtill it ſhould be remembered, that the Arabians are the firſt navigators upon record, except the merchants of Coſmas, that penetrated to China; that they are antecedent to the Europeans in this voyage by more than ſix centuries; and that they had found their way to the northern [249] frontier of this kingdom in the ninth century, while in the ſixteenth, the Europeans were diſputing whether Cathai and China were the ſame. We have no record of any European [250] viſiting this country by a northern route before Marco Polo, in the twelfth century; or of an European ſailing in the ſea of China between the time of that traveller and Nicola di Conti, in 1420. Barthema's voyage is between 1500 and 1504, immediately preceding the arrival of the Portugueſe.

Theſe circumſtances will naturally ſuggeſt reflections in regard to the Arabs of the Deſert, and the Arabs on the Coaſt. The ſons of Eſau were plunderers by preſcription and profeſſion; their hand was againſt every man, and every man's hand againſt them. The family of Jocktan [251], in Yemen, Hadramaut, and Oman, were as naturally commercial; and as they anticipated the Greeks and Romans in the navigation to India, and the modern Europeans in the diſcovery of China, it is no more than their due to aſcribe to them a ſpirit of commerce, enterprize, or the thirſt of gain, in ages which

[249] Whether actually an Arab or not, I cannot diſcover; but the Arab ſays, he was acquainted with one, who had ſeen a man that had travelled on foot [by land] from Samarcand to Canfu, with a load of Muſk; and had traverſed all the cities of China one after another. This is a proof, at leaſt, that the communication was open between Samarkand and China; and as Samarkand, at that time, was ſubject to the Moſlems, this traveller was at leaſt a Mahometan, if not an Arab. Renaudot, p. 71.

[250] Europeans *had* reached China, but from a different cauſe. M Polo found a French goldſmith at Cambalu; but he had been carried off from Poland by the Tartars, who had made an irruption into that country.

[251] Cedrenus calls them, Interior Arabians. Aman and Jektan, p. 422. Yemen and Jocktan. Τετίσιν Ὁμηρίται δὲ καὶ ΙΣΜΗΟΡΟΙ.

no hiſtory can reach; and to conclude, that if the precious commodities of the Eaſt found their way to the Mediterranean, as undoubtedly they did, the firſt carriers on the ocean were as undoubtedly the Arabians.

Whether we are better able to underſtand the Greeks, or whether the Greeks are more intelligent and better informed than the Arabs, I cannot ſay; but Coſmas, who was never in India himſelf—who was a monk, and not the wiſeſt either of his profeſſion or his nation, is far more diſtinct and comprehenſible in the ſixth century, than the two Arabs in the ninth, or Al Edriſſi in the twelfth. He gives a very rational account of the pepper trade in Malabar, and the meeting of the merchants from the Eaſt with thoſe of Europe, from the Red Sea, and Gulph of Perſia, in Ceylon, which in his age was the centre of this commerce; and he affords a variety of information, which the Arabians either did not know, or have not recorded. But we ſhall have recourſe to him again when we arrive at Ceylon.

I have more than once noticed the Rajah, who, as Pliny informs us, attended the embaſſy from the king of Ceylon to Claudius, and who aſſerted, that his father had viſited the Seres. I once thought that this Rajah went by ſea; but upon a cloſer inſpection of the paſſage, it is plain that he went by land from Bengal acroſs the mountains called Emodi. Still we have, upon the whole, a proof, that through the intervention of different nations, a communication was open from the Red Sea to the country of the Seres. Whether the Seres are Chineſe, has been much diſputed; but that they were viſited by ſea, is true, if the evidence of Coſmas[252] is

[252] Coſmas calls them Tzinitzæ, and Tziniſtæ. See Diſſertation ii. infra.

ſufficient;

ſufficient; and that they were approachable by land through Tartary on the north, is aſſerted likewiſe by Pliny and Ptolemy. This is a peculiarity that ſuits no nation but the Chineſe; and if we find this fact recorded from the time that hiſtory commences, it is a ſtrong preſumption that the ſame intercourſe took place many ages antecedent to the accounts which have come down to the preſent time.

Whether the author of the Periplûs himſelf ſailed with the monſoon, or by the coaſts which his narrative takes in ſucceſſion, he has not informed us; but if he was in India more than once, he might have tried both the different routes. His leaving this circumſtance undetermined, may induce a ſuſpicion that he was a geographer, rather than a voyager. But the ſame circumſtance occurs in Capt. Hamilton's Account of the Eaſt Indies: he gives the ports in ſucceſſion, from the Cape of Good Hope to China; yet he certainly did not viſit them all in one voyage, but gives us the reſult of the knowledge he had acquired in all his different navigations.

For this account of the monſoons, and the effects produced by them relative to the commerce of the ancients, no apology is requiſite: it is of the very eſſence of the deſign propoſed from the commencement of this work, which was intended not merely as a comment on the Periplûs, but from the opportunities afforded by that journal to inveſtigate the commerce of the Eaſt in all its branches; to trace its progreſs or ſituation in different ages, and to examine its relations, cauſes, and conſequences, till the new era of diſcovery commenced by the efforts of the Portugueſe, under the auſpices of Don Henry, and the great work was eſſentially completed by the achievements of Gama and Columbus.

We return now to the narrative of the Journal, which was interrupted at Bárakè, for the purpoſe of introducing Hippalus to the acquaintance of the reader, and commences again with Ela-Bakarè, altered as to its orthography, in which it now correſponds with the Beccare of Pliny, and the Bákarè of Ptolemy. It is now likewiſe augmented with the addition of Ela; in which, as has been obſerved, we recover the Eli of Marco Polo, and the d'Eli or d'Illi of our charts. In this paſſage there is mention of the Ruddy Mountain [253], and then an omiſſion in the text, which requires examination before we can proceed. I have lately learnt that d'Illi itſelf is not red, but that there are red hills, or land, both to the north and ſouth of it: the red hill to the ſouth, lying near the ſea, is that which we muſt prefer for the Ruddy Mountain of the Journal; and as the features of nature are indelible, it is much ſatisfaction to eſtabliſh the conſiſtency of the narrative upon ground ſo well aſcertained. I conſider this, therefore, as a point fixed; but I ought not to omit, that the Oriental Navigator [254] notices red cliffs much lower down, both on the north and ſouth of Anjenga; and as we are approaching very faſt to Cape Comorin, if it ſhould appear preferable to others to aſſume theſe for the Ruddy Mountain, there is confeſſedly ſome ground for the ſuppoſition.

[253] I have received the following extracts from Capt. Henry Cornwall's Remarks on the Coaſt of India, 1720; the work itſelf I have not ſeen:

" Southward of Mount d'Illi, in fair wea-
" ther, you may ſee the Dutch ſettlement of
" Cananoor, which will bear N.N. by N. 4½
" leagues; you bring the flag-ſtaff N.E. by
" E. about two miles off ſhore, and then you
" will bring that peak ſeen over Calicut E.
" by N. over a *reddiſh hill* by the ſea ſide."

" Four leagues to the ſouthward of For-
" moſa there lies a *reddiſh hill*, by the ſea-
" ſide." This muſt be a league north of d'Illi; for Formoſa is five leagues from d'Illi, according to the Oriental Navigator, p. 223.

" When Mount d'Illi bore S.E. by E.
" about four leagues, Mount Formoſa bore
" N.E. ¼ N. three leagues . . . . . Two hills
" were in ſight; one to the ſouthward, and
" the other northward; the land hereabouts
" appearing *reddiſh* near the ſea-ſide, eſpecially
" towards ſunſet."

[254] P. 227.

The

The omiſſion [255] in the text may be ſupplied, by ſuppoſing that the country of Pandíon is intended; and the ſentence would then expreſs, that after leaving Ela-Bákarè, you arrive at the Red Cliffs, and beyond them the Parália [256], or coaſt of the territory ſubject to Pandíon, which fronts the ſouth, and where you find the town of Kolkhi, and the Pearl Fiſhery. By this we are to underſtand, that he means the ſouthern coaſt beyond Cape Comorin; and ſo he afterwards expreſſes himſelf; for he reverts to Comorin, and then proceeds again to Kolkhi and the fiſhing-ground.

Ptolemy makes no mention of the kingdom of Pandíon previous to Komar; but commences the province of the Aii with Melênda and Elanki [257], and makes it terminate at Comar. This would embrace the modern Calicut, Cochin, and Travancore; and in this tract we have ſtill an Aycotta near Cranganoor, that is, the fortreſs of Ai [258]. In all other reſpects, the diviſion of the provinces is nearly the ſame in Ptolemy and the Periplûs, from Barugáza to Comar; and their want of correſpondence here, is a circumſtance in favour of both; for the kingdom of Pandíon is placed by both on the eaſtern ſide of the peninſula, and Módura, his capital, is the preſent metropolis of Mádura. If he had a territory on the Ma-

[255] Ἀπ' Ἐλαβακαρὴ τὸ λεγόμενον Πυῤῥὸν ὄρος ἄλλη παρῆκε χώρα τη ..... κης ἡ Παραλία λεγόμενη πρὸς αὐτὸν τὸν νότον.

We may read, ἄλλη παρῆκε χώρα τῆς Παδιονικῆς, confirmed by the following clauſe: Ἐν ᾗ καὶ Κολύμβησίς ἐστιν ὑπὸ τὸν βασιλέα Πανδίονα πανικῆ. But if by the text we are to underſtand that Elabakare itſelf is called the Ruddy Mountain, perhaps there is ſome further omiſſion or corruption in the text. I wiſh to conſider Ela as Mount d'Illa, and Bákarè, or Ela-Bákarè, as Ram-d'Illi, near the mouth of the river where the veſſels lay; and here might be the reddiſh hill one league N. of d'Illa.

[256] We ſhould naturally ſuppoſe that Paralia was a Greek term, and literally *the coaſt*; but Mr. Hamilton informs me, that Paralaya, in Sanſkreet, ſignifies the *remoteſt region*; that is, the extreme part of the peninſula.

[257] Nelkunda and Ela.

[258] D'Anville, p. 116. Paolino, p. 86.

labar [259] ſide, it was by conqueſt; and Pliny is in harmony with both: when ſpeaking of his poſſeſſions on this ſide, he ſays, Módufa, the capital of Pandíon, was at a great diſtance inland.

XII. BALÍTA, COMAREI, KOLKHI, PEARL FISHERY.

BALITA is the firſt place mentioned by the Periplûs after leaving the Ruddy Mountain: it is the Bam-bala [260] of Ptolemy; but we have nothing to determine its poſition, except the mention of its having a fine road for ſhipping, and a village on the coaſt. No repreſentative of Calicut appears, and probably it did not then exiſt, nor for ſeveral centuries afterwards. The Kolkhi of the ancients has been frequently miſtaken for it; but as Kolkhi is beyond Comorin, and is the ſeat of the Pearl Fiſhery, the ſuppoſition is impoſſible. Calicut [261] was the grand centre, for many ages, of all the Eaſtern and Weſtern commerce, from its origin in 805 [262] till the arrival of the Portugueſe; and though its ſplendour is now eclipſed, it is ſtill a place of great trade for pepper [263], cardamums, ſandal-

[259] The country of Malabar Proper could raiſe more than twelve hundred thouſand men, according to Capt. Hamilton, i. 288.

[260] There is a Tum-bala on this coaſt ſtill; but whether it is ancient or modern I know not, nor whether its poſition would be ſuitable, if thoſe points could be aſcertained.

[261] We have a Mahomedan account of the ſettlement of the Moſlems at Calicut, taken from Feriſhta, and publiſhed in the India Ann. Regiſter 1799, p. 148. Miſcel. But as Feriſhta was a Mahomedan himſelf, ſo does he ſay, he has it from a poetical account; and though it preſerves the outline of Ceram Perumal's retirement, and the diviſion of Malabar, it ſtill contains much that is problematical, and ſeems a Mahomedan fiction to give the Moſlems a legal ſettlement in the country. Subjoined to this account, however, there is a valuable note, giving an account of the kingdom of Bijnagar—its riſe, power, and diſſolution; and proving, that the influence of the Ram Rajah extended over Malabar.

[262] There are two dates, 907 and 805. D'Anville, Antiq. de l'Inde, p. 114.

[263] Tellicheri, an Engliſh fort and factory, was eſtabliſhed on this coaſt for the purpoſe of procuring theſe articles, and Angenga.

wood,

wood, and other commodities; much frequented by the veſſels of Europe, and ſtill more by the traders from the Red Sea, Maſkhat, and the Gulph of Perſia. Theſe are circumſtances too well known to be inſiſted on; and we muſt proceed to Comar, no leſs conſpicuous in its ſituation at the apex of the peninſula, than in the preſervation of its name through ſo many ages, and ſo many revolutions both of commerce and of empire.

At Komar there was an harbour and a fortreſs, with a garriſon: there was likewiſe ſome religious eſtabliſhment, in which thoſe who dedicated themſelves to the worſhip of the preſiding deity firſt conſecrated themſelves by ablutions, and then entered into an engagement of celibacy. Women partook of this inſtitution as well as men; and the legend of the place reports, that the goddeſs to whom their ſervices were dedicated, uſed formerly to practiſe the ſame ablutions monthly at this conſecrated ſpot.

The name of the place, according to Paolino [264], is derived from Cumari, a virgin deity, the Diana and Hecate of the Hindoo mythology. The convent [265], he adds, ſtill exiſts, and the ſame ſuperſtition is practiſed at a mountain three leagues inland, where they ſtill preſerve the tradition of Cumari's bathing in the ſea. The Sanſcreet name, he adds, is Canyamuri, *Cape Virgin*, but contracted by the natives themſelves into Comarì, or Cumarì. He mentions

[264] Cumari, he informs us, ſignifies a virgin; but Comr is the moon, in Arabic; and Diana (as Phœbe) is the goddeſs of the moon, the ſiſter of Phœbus. Whether Comr has ſuch a meaning in Sanſcreet, or the goddeſs ſuch an attribute in Hindoo mythology, may be enquired.

[265] The religious of this ſort, he ſays, are called Jogi, *coenobites*, or Go-ſuami, *lords of the cow*, from their ſuperſtition relative to that animal; or Samana, *inoffenſive*, becauſe they deprive no creature of life. (Theſe are the Germanai of Strabo.) They live in convents under a ſuperior, ſleep on the ground on mats of palm-leaf, and communicate little with the world.

alſo

alſo a ſmall port here, conformably to the account in the Periplûs; and a church, founded by St. Xavier, on a mountain cloſe to the ſea, which, report ſays, is dedicated to the Virgin Mary; but on this head the good Carmelite is ſilent, and I know not whether the report is true.

Circumſtances ſo correſpondent, at the diſtance of two thouſand years, could hardly be found in any country except India; and to the local knowledge of Paolino we are much indebted. He has reprobated, indeed, all literary men, who preſume to determine queſtions in their cloſet relative to countries which they have never viſited; but though I and others, who purſue our ſtudies in retirement, owe him ſomething in return, I ſhall revenge myſelf by no other method, but by citing a beautiful paſſage from his work, deſcriptive of the Paralia[266], or Coaſt of Malabar. Paolino, on his return to Europe, had embarked in a French frigate called the Calypſo; and while he is purſuing his courſe between Cochin and Cape Comorin, he burſts out into a rapturous deſcription of the ſcenery preſented to his view:

" Nothing[267] can be more enchanting to the eye, or delicious to " the ſenſes, than is experienced in a voyage near the extremity " of the peninſula. At three or four leagues from the coaſt, the " country of Malabar appears like a theatre of verdure: here a " grove of cocoa-trees, and there a beautiful river pouring its tribute " into the ocean, through a valley irrigated and fertilized by its " waters. In one place a group of fiſhing-veſſels, in another a

[266] Paolino is miſtaken in ſuppoſing Paralia to be confined to the Pearl Fiſhery: it extends the whole way from Elabákarè to the Fiſhery, and is literally the coaſt of Malabar, in contradiſtinction to Paralia Soringorum, the Coaſt of Coromandel.

[267] P. 371.

" white

" white church [268], peering through the verdure of the groves;
" while the gentle land-breeze of the morning wafts the fragrance
" exhaled from the pepper, cardamum, betel, and other aromatics,
" to a great diſtance from the ſhore, and perfumes the veſſel on her
" voyage with their odours; towards *noon* ſucceeds the ſea-breeze,
" of which we took advantage to ſpeed the beautiful Calypſo to-
" wards the port of her deſtination."

Our Greek and Arabian conductors have no effuſions of imagination, but a picture of the country where we are, drawn upon the ſpot with the enthuſiaſm and ſenſibility of an Italian, will make ample atonement for the digreſſion. I need not add, that during the north-eaſterly monſoon, a voyage on the whole coaſt is effectually a party of pleaſure.

We are now to proceed to Kolkhi and the Pearl Fiſhery, in regard to which Paolino is much diſpleaſed that none of the geographers have agreed [269] in placing Kolkhi at Coléchè [270]. He will not allow any of us to know the leaſt of the ſituation of places which we have never ſeen, and yet we ſhall build on his own premiſes to ſubvert his concluſion; for he, in conjunction with all our charts, places

[268] There were many churches in this country, both of the Miſſion, and of the Malabar Chriſtians; but the irruption of Tippoo deſtroyed every Hindoo pagoda, and every Chriſtian church, as far as he penetrated. Aſ. Reſ. vii. 379.

To theſe Chriſtians of St. Thomas, Alfred ſent Sighelm, bp. of Sherbourne, who brought home many jewels, aromatics, &c. ſome of which remained long at Sherbourne. Hackluit, ii. 5.

I wiſh we had more authority for this than the tradition of Sherbourne, for Alfred deſerves every honour which can be added to his name.

[269] In Mr. Le Beck's Account of the Pearl Fiſhery it is ſaid, that the beſt divers are from Colliſh, on the coaſt of Malabar. I conclude that this is Coleché. Aſ. Reſ. v. 402.

[270] Queſta citta fu ſovente confuſa con Covalan, Colias, o Colis, degl' antichi, da quelli ſcritori . . . che non avevano eſſaminato il ſito locale delle due citta tra ſe molto diverſo. P. 74.

Coléchè

Coléchè [271] previous to Comorin; and therefore, whether we find a repreſentative for Kolkhi or not, his aſſumption muſt be falſe; for both Ptolemy and the Periplûs [272] place it, not to the weſtward, but the eaſtward of Cape Comorin. The Pearl Fiſhery is not now, and never was, carried on to the weſtward or northward of Cape Comorin. The Pearl Fiſhery is likewiſe marked out by another characteriſtic ſtill peculiar to it; which is, that pearl oyſters are found only at one place—the iſland of Epiodôrus, which can be no other than the iſle of Manar [273], and there the fiſhery is at the preſent hour. By the name of Epiodôrus, we may conclude a Greek of that name from Egypt was the firſt of his countrymen that viſited this iſland; and where would a Greek not have gone [274], if he had heard that pearls were to be obtained? The great requeſt in which they were at Rome and Alexandria, ſeems to have marked them out, not indeed as of greater value than diamonds, but as a more marketable and preferable commodity for the merchant.

The power which in different ages has preſided over the Fiſhery, whether native, Portugueſe, Dutch, or Engliſh, has regularly taken its ſtation at Tutacorin: the Fiſhery itſelf is always on the Ceylon ſide, towards Manar, at Chilao [275], Seewel [276], Condutchey, &c. The number of perſons who aſſemble, is from fifty to ſixty thouſand;

[271] Capt. Hamilton ſays, between the middle and weſt point of C. Comorin. i. 333.

[272] Ἀπὸ δὲ τὸ Κομαρὶ ἐκτείνουσα χώρα μέχρι Κόλχων, ἐν ᾗ κολύμβησις τοῦ πινικοῦ ἐστιν. Still both are to the eaſtward of Cape Comorin; and the iſland of Epiodorus removes all doubt. P. 373.

[273] Le perle naſcono vicino a Mannar. Paolino, 374. But he ſays likewiſe, there are two fiſheries: one to the weſtward of Ceylon, in the open ſea; and another eaſt of Cape Comorin, ſeparated by the Straits of Manar.

[274] In Cœlum.

[275] See Stevens's Hiſt. of Perſia, p. 402. He ſays Chilao ſignifies a Fiſhery in the native language.

[276] Mr. Le Beck's Acc. Aſ. Reſ. vol. v. p. 396.

conſiſting of divers, mariners, merchants, and tradeſmen of every deſcription. The Nayque of Madura, who was ſovereign of the coaſt, and the repreſentative of Pandíon, had one day's fiſhery; the Governor of Manar's wife, when the Portugueſe were maſters, had another day, afterwards perverted to the uſe of Jeſuits; and the owner of the veſſel had one draught every fiſhing-day. After the fiſhery was concluded, the fair was kept at Tutacorin. The brokerage and the duty amounted to four per cent.—paid by the ſeller. The veſſels were not fewer than four or five hundred, each carrying from ſixty to ninety men, of which one-third were divers. Capt. Stevens ſuppoſes the pearl of Manar to be inferior to that of Bahrein.

This fiſhery is likewiſe deſcribed by Ceſar Frederick, and a variety [277] of authors. He informs us, that the divers were chiefly Chriſtians of Malabar in his time; they are now a mixture of that deſcription, of Roman Catholics, and Hindoos; but the ſuperſtitions practiſed to preſerve the divers from the ſharks, and other dangers of their profeſſion, are all Hindoo. Several fanatics are well paid for their attendance during the fiſhery for that purpoſe; and the ſharks are as obedient to the conjuration of a Bramin, as they could be to a Malabar prieſt; for the charm is not perfectly efficacious. Thoſe who wiſh to enquire farther into the detail, will meet with a very excellent account in the Aſiatic Reſearches (vol. v.) by Mr. Le Beck; in which he will find that this fiſhery, which uſed to produce 20,000*l.* to the Portugueſe and Dutch [278], produced, in the year 1797, 150,000*l.* under the management of the Engliſh [279].

[277] Purchas, vol. iii. p. 1708. By Marco Polo, lib. iii. c. 20. who mentions the Bramin; and Betala, as the ſeat of the fiſhery. The king had a tenth; the bramin, a twentieth.

[278] Capt. Stevens.

[279] 300,000 Porto Nova pagodas.

In the age of the Periplûs, none but condemned criminals were employed in this ſervice; a practice common to all the nations of the ancient world, in their mines, in their gallies, in the conſtruction of their public buildings, and execution of all their public works. The mines of Potoſi are ſtill worked by ſlaves, where the ſame miſeries are experienced as Agatharchides[280] has depicted in the gold-mines of Egypt; while in Europe, or at leaſt in England, we never want freemen to work in our collieries, in our mines of tin, lead, or copper, whoſe labour is procured, and whoſe dangers are compenſated, by the higher price they obtain for the ſervices they are to perform.

I ought now, in compliance with the nature of the undertaking in which I am engaged, to follow my author to the concluſion of his work; but as I am perſuaded that he never went farther than Nelkunda himſelf, and that he has built upon report in all that is ſubſequent to that place; ſo does report grow ſo vague after quitting the Pearl Fiſhery and Ceylon, that though he mentions ſeveral circumſtances in common with other authors, there is ſo much indeterminate, that I reſerve it for a ſeparate diſcuſſion. My reaſon for aſſerting this is, that he extends the Coaſt of Coromandel to the eaſt; that he is no longer in particular, but general correſpondence only with Ptolemy; and that he has extended Ceylon towards Africa, inſtead of aſſigning it a poſition where it actually exiſts.

[280] Agatharchides had ſaid a great deal (ὅπερ εἰκὸς γίνεται) ἐκ ὀλίγων ἐν τοῖς χάυνοις καὶ πλακώδισιν ὑπονόμοις γινομένων. P. 27.

The multitude of bones ſtill found in theſe excavations is incredible, of wretches cruſhed by the falling in of the earth, as muſt naturally happen in a looſe and crumbling ſoil.

Pliny

Υπερβολὴν ἔν ἑδεινὶ τὸ πάθος δυστυχήματι καταλιπεῖν ἐκτραγῳδήσας. Apud Hudſon, p. 23.

But what remains is ſufficient:

Ὀστᾶ δὲ ἀνθρώπων ἄπειρα τῷ πλήθει, πτωμάτων

Pliny has ſaid ſomething of the paſſage between Ceylon and the continent, not very ſatisfactory indeed, but ſufficient to ſhew his opinion, that the trade was carried on by this ſtrait. The Periplûs ſeems to confirm this idea, and Ptolemy has nothing to the contrary; but if the opening in Adam's Bridge, near Manar [281], was no deeper at that day than at preſent, no ſhip of burden [282] could have paſſed it. Pliny informs us, that throughout the whole of the ſtraits the depth was not more than ſix feet; but that there were particular openings, ſo deep that no anchor could reach the ground. He is likewiſe ſo deceived in the poſition of the iſland, as to make the embaſſadors ſent to Claudius aſtoniſhed at ſeeing the ſhadows fall to the north; not reflecting that in their own country, if he had known its ſituation, they muſt have made the ſame obſervation annually, when the ſun was to the ſouth of the equator. Theſe and many other errors of the ancients, induce me to enter more largely into the account of Ceylon than the nature of my work requires; and this I ſhall conſider as the termination of my inquiry, leaving the remainder of the Periplûs for a general diſcuſſion, by way of ſequel to the whole.

[281] Pliny calls either this iſland, or Ramana Koil, the Iſland of the Sun.

Manar, in the Tamul language, ſignifies a ſandy river; applied here to the ſhallowneſs of the ſtrait. Aſ. Reſ. v. 395.

The fiſhery is uſually on the Ceylon ſide; as at the Seewel Bank, 20 miles weſt of Aripoo, Condatchey, &c. Ibid.

Hardouin allows that the Coliacum Promontorium is not Comorin, but at the Straits of Manar.

[282] A paſſage in Pliny, omitted in the printed copies, is, Magnitudo alterna millia ad foram; which Voſſius inſerts and reads, Magnitudo ad terna millia amphórum. No ſhip of this ſize could now paſs the ſtraits

Hardouin adopts this emendation, lib. vi. 24. without mention of Voſſius.

XIII. CEYLON.

THE firſt account of Ceylon was brought to Europe by the Macedonians, who were with Alexander in the Eaſt. Oneſicritus is recorded as the firſt author who mentions it, under the title of Tapróbana; and its variety of names in the Eaſt, as well as Europe, is one of the extraordinary circumſtances that attend it.

Lanca [283], or Langa, - is the true Sanſkreet name, according to Paolino, p. 371. Voſſius ad Melam, lib. iii. 7.

Ilam, - - - another Sanſkreet name, ſeemingly joined with Lanca; Lanca-Ilam. Id. There is a fabulous iſland in Al Edriſſi, Lanchialos, which he ſays is ten days ſail from Sarandib. Is it not an error from Lanca-Ilam?

Salabham, - - another Sanſkreet name, ſignifying Sal, true; and labham, gain. Paolino.

Salabha-dipa, - -

Salabha-dip, - - Sanſkreet. The Iſland of *true or real Profit*, from its rich productions of gems, ſpices, &c. Paolino.

Tapróbana [284], - - the firſt name brought to Europe. Bochart makes it טפ-פרונ Taph Parvan, Littus Tap-raban. Mr. Hamilton does not diſapprove of Tap-raban, but adds, that there is no alluſion to ſuch a name of the iſland in any Sanſkreet writing he has ſeen.

[283] Lankoweh. Capt. Mahoney on Ceylon, Aſ. Reſ. vii. 49.

[284] Suppoſed by Burrows to be Tapo-bon, the Wilderneſs of Prayer. Ayeen Acbari, ii. p. 320. oct. ed. This is not ſo probable as

aureum,

aureum, 2 Chron. iii. 6. and the Ophir of Solomon. But it is from Tape, an iſland, and Ravan, a king of Ceylon, conquered by Ram. According to the Aſ. Reſearches, v. p. 39. Tapravan, or Tapraban.

Salika - - - of Ptolemy, who ſays, it is the Taprobana of the ancients, afterwards called Simoondu, but now Sálika or Sálikè; the inhabitants, Salæ. Salikè is therefore an adjective like Ariakè, Barbarikè, Limurikè, with γὴ or νῆσος underſtood. And the iſland of Salè approaches very nearly to Selen-dive [285].

Seren-dip, - - Σαραντιπ. Chyſococcas in Voſſius. Διϐὸ γ' ἔστιν αὐτοῖς νῆσος ἡ χώρα. Voſſ. ad Melam, 257. Var. ed. 569. Philoſtorgius.
Sielen-dip,
Selen-dib.

Selen-dive, - - the Seren-dib, or iſland Seren, Selen, of the Arabs; the Sarandib of Al Edriſſi; the *Divis* [286], and *Serendivis*, of Ammianus Marcellinus, who is the firſt author of the Latins or Greeks who uſes this name. Divis, the Lackdives or Maldives, or iſlands in general. Seledivis, name of the people, Salai, and of the iſland, Salikè, would be naturally derived from them. Aſ. Ref. vol. vii. p. 431. in a highly curious Treatiſe on Ceylon, by Capt. Ed. Moor.

[285] There is a particular caſt on the iſland at this day, called Salè or Challe, and Challias: they are labourers, manufacturers of ſtuffs, and cinnamon-peelers; and if the antiquity of their eſtabliſhment in the iſland (for they are not a native tribe) be eſtabliſhed, the

[286] Divis is uſed in the caſe in which it occurs. P. 306.

Selen-dive, the iſland Selen. Am. Mar. lib. xxii. p. 306.

Palæſimoondu[287] - of the Periplûs. Pliny ſays there was a river and city of that name, with 250,000 inhabitants; the natives called Palæogoni, perhaps from Bali, the Indian Hercules. Paolino interprets it Paraſhrimandala, the kingdom of Paraſhri, the youthful Bacchus of the Hindoo mythology. But it ought not to be omitted, that Mr. Hamilton conſiders Simoonto as expreſſing the *utmoſt boundary* or *extremity*; and Paliſimoonto, as the limit of the expedition of Bali, the Indian Hercules.

Sindo Candæ, - - ſo Ptolemy calls a town and the natives, on the weſt; Galibi and Mudutti, in the north; Anurogrammi, Nagadibii, Emni, Oani, Tarachi, on the eaſt; Bocani, Diorduli, Rhodagani, and Nagiri [Nayrs], on the ſouth.

Sailatta, - - - the name in uſage in Malabar. Paolino.

Singala-dweepa, - is the true Sanſkreet name, according to Sinhala-dviba. Paolino. Mr. Hamilton; the iſland of Singala[288]; for dwipa, or dweepa, is equivalent to the

[287] Pulo Simoon. Voſſius ad Mel. lib. iii. 7. Inſula Siamenſium, with the Perſian addition of Diu Div, an Iſland. This is a fanciful etymology; and yet the temple in Ceylon, deſcribed by Capt. M'Kenzie, As. Reſ. vol. vi. p. 438. very much reſembles the temples in Siam, Ava, &c.

[288] Singha, a lion; Singhalais, lion-raced; from a fable of a king of Ceylon, born of a lion. Capt. Mahoney, As. Reſ. vii. 48.

diva

diva of the Arabs: hence Singala-diva became their Selendive and Serendive; literally, the iſland of the Singalas, the Chingaleſe, and Chingulays, of the Europeans; the Singoos or Hingoos, as the natives ſtill call themſelves. I cannot help thinking this the moſt eaſy and natural of all the etymologies that have occurred; and I return my beſt thanks to Mr. Hamilton for the ſuggeſtion.

Cala, - - - the name uſed by the Arabs of Renaudot, p. 61.; but perhaps Sala [289].

If ſuch is the fluctuation in the name of this iſland, the different reports of its ſize and ſituation are ſtill more extraordinary.

Oneſicritus eſtimates it at five thouſand ſtadia; but, according to Strabo, mentions not whether it is in length, breadth, or circumference. I conclude that he means the latter; becauſe, at eight ſtadia to the mile, this amounts to ſix hundred and twenty-five miles; which is not very diſtant from the truth, for in Rennell's laſt map

	Miles.
The length is - - - -	280
The breadth is - - - -	150
The circumference is - - -	660 [290]

If therefore we interpret Oneſicritus rightly, he is entitled to the merit of correctneſs, as well as diſcovery; an honour due to very

[289] Other names in Harris, vol. i. 677. are, Tranate, Hibenaro, Tenariſim, *i. e.* Tenaceram; but theſe have been little noticed, and Tena-ceram is evidently an error.

[290] From Dondra Head to Tellipelli, 270 miles; from Colombo to Trincole, 160.—Hugh Boyd, in the India Ann. Reg.

few

few of the ancient geographers in diſtant regions; but to make amends, he adds, that it lies twenty days ſail from the continent.

Eratoſthenes reduces this diſtance to only ſeven days ſail, which is ſtill too much; for it is not more than thirty-five miles from Point Pedro to Calymere, and fifty from the point next Manar to the oppoſite coaſt at Ramana Coil, which is the point where Pliny meaſures, or about an hundred and ſeventy from Cape Comorin to Manar. But then Eratoſthenes adds, that it extends eight [291] thouſand ſtadia towards Africa; that is, according as we compute the ſtadium, either eight hundred, or a thouſand miles, in a direction exactly the reverſe of truth. In this I am forced to confeſs, that the Periplûs has followed Eratoſthenes, and added to his error; for it is ſtated in expreſs terms, that it reaches almoſt to the coaſt of Azania [292], which lies oppoſite to it in Africa. In ſome account of this ſort exiſts the cauſe of the error in the Arabian geographers; for Al Edriſſi has confounded Cape Comorin, or Comari, with Comar [293], that is, the iſland of Madagaſcar; and in his map he has actually placed Madagaſcar to the eaſtward of Ceylon. This ariſes from his extenſion of the coaſt of Africa to the Eaſt till it reaches

[291] Strabo, p. 72. 5000; p. 690. 8000.

[292] Καὶ σχεδὸν ἐις τὸ κατ' αὐτὴν ἀντιπαραχείμενον Αζανίας μέρος.

[293] It ſeems to admit of proof, that Al Edriſſi has made two iſlands out of Ceylon, inſtead of one. Saranda, he ſays, (p. 28.) is 1200 miles in circumference; and Sarandib (p. 31.) is 80 miles long and 80 miles broad. And yet that Saranda is Ceylon, as well as Sarandib, appears manifeſt, by his placing the Pearl Fiſhery there, and making it a great reſort of merchants for ſpices. He has a different miſtake about Comar, or Comr; for Cape Comorin, and Comr the iſland of Madagaſcar, are confounded. In p. 31. Comr is a very long iſland [or country], the king of which lives in Malai. This is evidently the peninſula terminated by Comorin, the king of which lived in Malabar; and the iſland Sarandib lies ſeven days ſail from it, which is the diſtance given by the ancients. But p. 34. we have Comr again, one day's ſail from Dagutta: now this is Madagaſcar; for Dagutta is in Sofala. Perhaps, if we ever obtain a ſcientific tranſlation of Al Edriſſi, we may find diſtinctions to obviate this confuſion; for his tranſlator, Gabriel, knew as little of Ceylon as of Ruſſia.

the

the ſea of China, and the neceſſity he was under of making Madagaſcar parallel to the coaſt of Zanguebar.

It is with concern that I mention theſe errors, in which the author of the Periplûs is involved, and upon account of which I am conſtrained to allow his want of information in every thing beyond this point, and to confine myſelf within the boundary of his knowledge, which muſt be fixed at Ceylon.

Strabo ſuppoſes Ceylon not to be leſs than Britain, and Joſephus [294] conceives Britain not leſs than the reſt of the habitable world: theſe, indeed, are expreſſions at random; but what ſhall be ſaid of the amplification [295] of Ptolemy, who makes its

	Miles.
Length - - - - -	1,050
Breadth - - - - -	700
Circumference - - - -	2,450

He does not, indeed, extend it towards Africa; but he carries the extreme ſouthern point more than two degrees ſouth of the equator, which in reality is little ſhort of ſix degrees in northern latitude. His errors deſcended much later than could have been ſuppoſed; for Marco Polo [296] mentions this iſland as two thouſand four hundred miles in circuit; and adds, that it had formerly been three thouſand ſix hundred, but part of it had been ſwallowed up by tempeſt and inundation. And even ſo late as ſixty years before the diſcovery of Gama, Nicola di Conti ſuppoſes the circumference to be two

[294] Strabo, p. 130. Camden's Britannia, pref. lxxviii. See Pytheas Polyb. iv. 629. 40,000 ſtadia.

[295] D'Anville obſerves, that this amplification is as 14 to 1.

[296] I am not certain that the amplification of M. Polo deſcends from Ptolemy; for he ſays, this is the ſize, in the mariners' maps, of India. Had Ptolemy ſeen ſuch a map? or had the Mahomedans introduced the maps of Ptolemy into India?

thouſand miles. Now what is moſt extraordinary in this is, that both [397] theſe travellers muſt have ſeen the iſland itſelf, and muſt have ſailed beyond it, if not round it.

My purpoſe in producing theſe facts is not to expoſe the errors of thoſe who have preceded me on the ſubject, but to ſhew how uncertain all information is, when grounded upon report. And yet, in the midſt of this darkneſs, Ptolemy's information was ſuch as, in one inſtance, to confirm the rank which he ſo deſervedly holds in preference to others; for he gives the names of places more correctly, and more conformably to modern intelligence, than appear in any other author, Greek, Latin, or Arabian. This is a merit peculiar to him, not only here, but in the remoteſt and leaſt known regions of the world: it proves that his inquiries were made at Alexandria of merchants or mariners, who had actually viſited the countries he deſcribes; but that they had not the means of giving true poſitions, becauſe they had neither inſtruments for obſervation, or the compaſs to mark their courſe. The North Polar Star was not viſible; and if they ſailed by the Canobus in the ſouthern hemiſphere, as Ptolemy aſſerts they did, that ſtar is not within fifteen degrees of the Pole, and would give occaſion to a variety of miſtakes. Still, under all theſe diſadvantages, it is ſomething to have procured names that we can recognize; and theſe names at once put an end to the diſpute formerly agitated among the learned, whether the Taprobana of the ancients were Ceylon or Sumatra. They prove likewiſe, that ſome merchants, or travellers, had reached the capital and interior of the iſland. By them the capital was found where Candy now is, and called Maa-gram-

[397] Not Nicolas di Conti, unleſs upon his return.

mum,

num [298], *the great city*, or metropolis, which was placed on the river Ganges, ſtill called the Ganga, Gonga, or Ma-vali-gonga, *the great river of Bali* [299], which flows to Trincomalee. The Hamallel mountains, among which is the Pike of Adam, are likewiſe laid down relatively in their proper poſition, and called Malè, the Sanſcreet term for mountains; and above all, Anuro-grammum [300] is preſerved in Anurod-borro, or Anurod-gurro, a ruin found by Knox, while he was eſcaping to the coaſt; which, he ſays, lies ninety miles north-weſt from Candy, and in a poſition correſpondent with the account of Ptolemy. He found here three ſtone bridges; the remains of a pagoda or temple, ſuch as no modern Ceyloneſe [301] could build; and many pillars, with ſtone-wharfs on the river Malwatouwa. Sindocandæ is another name expreſſing the mountains of the Hingoos, the name by which the natives call themſelves; and Hingo-dagul is their name for Candy; for Candi is a hill or fortreſs on a mountain; and Hingo-dagul, the city of the Hingoos, perverted by corruption into Chingoo-lees [302], by which name they are at preſent known to the Europeans ſettled on the coaſt [303].

[298] Theſe facts are collected from Paolino, Knox, Ribeyro, Major Rennell, and particularly d'Anville. Antiq. de l'Inde, p. 150.

[299] Bali occurs ſo repeatedly in Ceylon, that there is reaſon to think that Palæogoni in Pliny, is not a Greek compound, but expreſſes the deſcendants, or ſervants, of Bali.

[300] Gramma ſignifies a city, in *Sanſcreet*. Paolino, p. 250. Knox, p. 6. Borro, boor, poor, and goor, have the ſame meaning.

[301] Knox, pp. 72. 80. The natives of Hindoſtan, the peninſula, or Ceylon, are not deficient in ſkill, art, or power, to execute ſuch works as are found here, or at Elephanta, or at Elore. But the Hindoo governments are not wealthy or powerful enough to ſupport the expence; and perhaps the impulſe of ſuperſtition has not energy enough to require it.

[302] For the whole of this, ſee Knox's Hiſtory of Ceylon. He was ſeized after ſhipwreck, and detained 25 years a priſoner. He poſſeſſed the language; and though he may have his errors, is highly worthy of credit as an author of integrity, principles, and religion.

[303] D'Anville likewiſe mentions the wild country on the ſouth, where elephants are ſtill found, with other reſemblances; but theſe are ſufficient to prove the fact for which they are adduced.

Bochart has many other names, in which he finds a reſemblance; and thoſe who know the country, by reſiding in it, might diſcover more; but I have confined myſelf to ſuch as are incontrovertible; and theſe are ſufficient to raiſe our aſtoniſhment, how a geographer could obtain ſo much knowledge of a country, without being able to aſcertain its dimenſions or poſition.

Ptolemy has ſtill another particular which is very remarkable; for as he places the northern point of his Taprôbana, oppoſite to a promontory named Kôru, ſo has he an iſland Kôru between the two, and a Tala-Côri on Ceylon; and Kôry, he adds, is the ſame as Calligicum. This is denied by d'Anville, who ſeparates the two capes, and makes Kôry, the point of the continent, at Ramiſeram; and ſuppoſes Kalligicum to be Kalymere, or Kallamedu. This may be true or not, but it carries us away from the intention of the author; for Ptolemy has nothing to correſpond with the northern head of Ceylon, now called Point Pedro [304]; but he makes his Borêum, or northern cape, erroneouſly indeed, oppoſite to Kôry; and his three Kôrys on the continent, on the intermediate iſland and on Ceylon, are in perfect correſpondence with circumſtances actually exiſting.

The expedition of Ram to Ceylon, and his victory over Rhavan, or Rhaban, king of that iſland, is one of the wildeſt fables of Hindoo mythology; but he paſſed into the iſland at the ſtrait, ſince called, by the Mahomedans, Adam's [305] Bridge. The whole country round, in conſequence of this, preſerves the memorials of his conqueſt. There is a Ramanad-buram on the continent cloſe to the bridge; a

[304] Tellipelli is more northerly than Point Pedro; but, lying out of the courſe of the voyage, is ſeldom noticed.

[305] The exiſtence of tigers, and other noxious animals, in Ceylon, almoſt proves an aboriginal communication with the continent by means of this bridge. Elephants might have been imported, but a cargo of tigers is not probable.

Rami-ceram, or country of Ram, the iſland cloſe to the continent; a Point Rama, on the continent. The bridge itſelf, formed by the ſhoals between Rami-ceram and Manar, is Rama's Bridge; and in Rami-ceram is Raman-Koil, the temple of Ram. This Koil or temple is undoubtedly the origin of Kôru; and the repetition of it three times in Ptolemy, is in perfect correſpondence with the various alluſions to Ram at the preſent day. Kôru is likewiſe written Kôlis [306] by Dionyſius, and the natives called Kôniaki, Koliki, and Koliaki, by different authors. This fluctuation of orthography will naturally ſuggeſt a connection with the Kolkhi of Ptolemy and the Periplûs, which both of them make the ſeat of the Pearl Fiſhery; and if Soſikoorè be Tuta-corin, as d'Anville ſuppoſes, the relation of Kolkhi to that place will lead us naturally to the vicinity of Ramana-Koil; for Tuta-corin was the point where the Dutch preſided over the fiſhery while it was in their hands, and maintains the ſame privilege now under the power of the Engliſh. But Koil, whether we conſider it, with Ptolemy, as the point of the continent, or ſeek for it on the iſland of Ramiſeram [307], is ſo near, and ſo intimately connected with Manar, the principal ſeat of the fiſhery, that there can be little heſitation in aſſigning it to the Kolkhi of the ancients. Whether there be now a town of conſequence either on the continent or the iſland, I am not informed; but that

[306] Paolino ſuppoſes Kolis to be Covalam; but Dionyſius evidently makes Kôlis the ſame as Κόλυ: Νοτίης προπάροιθε κολώνης . . . Κωλίαδος, μεγάλην ἐπὶ νῆσον ἔχουσι . . . Ταπροβάνην.

[307] See the account of Ramiſur and Manar, in Capt. Mackenzie's Narrative, Aſ. Reſearches, vol. vi. p. 425.; a paper which gives the beſt account of the two iſlands, the ſtraits, and Adam's Bridge, that I have yet ſeen. There does not appear any town or any buildings on this iſland, except thoſe about the pagoda. The conflux of pilgrims is immenſe. Coil, in the Tamul language, ſignifies a temple. P. 427.

Koil,

Koil, and Kolis, and Kolkhi, and Kalli-gicum [308], are related, I have no doubt.

The Kolkhi of Ptolemy is on the coaſt, indeed, previous to a river called Solên; and ſuch a river appears in Rennell's Map, with the name of Sholavanden applied to a town on its bank; or Solên [309] may be the Greek term which ſignifies a ſhell-fiſh, alluding to the Pearl Fiſhery in the neighbourhood. If therefore we adhere to Ptolemy, the iſſue of this river would give the poſition of Kolkhi to a certainty; but the deſcription of the Periplûs would lead us directly to Koil, on the iſland Rami-ceram; for it is there ſaid, that the Bay of Argalus ſucceeds immediately next to Kolkhi. Now the Argalus of the Periplûs is the Orgalus of Ptolemy, which he places inſtantly ſubſequent to his promontory Koru; and if we ſuppoſe this promontory to be the extreme point of the continent north of Rami-ceram, which it is, we obtain the poſition of the Kolkhi of the Periplûs, without a doubt. The iſland Kôru of Ptolemy is placed at a diſtance from the main, erroneouſly, as all his iſlands are; but as it is certainly the ſame as Rami-ceram, and Rami-ceram is ſeparated from the continent only by a narrow channel, the

[308] For Kalligicum, Salmaſius reads Καλιακόν. Plin. Ex. p. 1113. And he adds, Præter alia hæc re moveor, Καλιχοὺς vel Καλιακοὺς veterum, eſſe recentiorum Κόλχους. And yet, ſtrange! he thinks the Kolkhi of the Periplûs to be Cochin.

[309] Solên, in its original ſenſe, is a pipe or flute, which the oblong muſcle may be ſuppoſed to repreſent, but not the pearl oyſter. Perhaps this muſcle was found in the river, without relation to the fiſhery. I learn from Capt. Mackenzie, that there is a fiſhery on this ſide of the ſtrait neareſt the continent' called Chanque, carried on along a range called the Low or Flat Iſlands. The river, as d'Anville has obſerved, divides inland, and falls into the ſea by two mouths—one on each ſide of Kôru. D'Anville, Antiq. de l'Inde, p. 123. Aſ. Reſearches, vol. vi. p. 426. Chanquo, the native term for the pearl oyſter, according to Salmaſius, is derived from Concha, and received from the Greek and Roman traders. 1129.

iſland

iſland Kôru and the cape Kôru may therefore have been brought into one. I certainly think that Kôru, Kolis, Kolkhi, and Koil, are the ſame; but I am not ſo much led by the name, as by the poſition aſſigned to Kolkhi in the Periplûs, immediately preceding the Bay of Argalus.

My own deductions on this queſtion, I muſt confeſs, are contrary to Ptolemy; and his authority has induced d'Anville, Rennell, and Robertſon, to aſſume Kilkhare which is at the mouth of the river. It is but reaſonable to conclude, that the concurrence of witneſſes ſo eminent will prevail againſt the evidence of the Periplûs, and any thing I have to offer in its favour. Still, however, it is juſt to ſtate the queſtion fairly, and leave the determination to thoſe who may chuſe to ſcrutinize it more preciſely. On one point all teſtimonies agree; which is, that Kolkhi cannot be Coleche, as Paolino with much confidence aſſerts; for it is impoſſible that it ſhould be to the weſt of Cape Comorin.

From the fiſhery we may proceed to the iſland itſelf; and the moſt diſtinct knowledge we have of Ceylon from the ancients, is found in Coſmas Indicopleuſtes, whoſe narratives are as faithful as his philoſophy is erroneous. He tells us honeſtly, that he was not at Ceylon himſelf, but had his account from Sôpatrus, a Greek, whom he met at Adooli, but who died five-and-thirty years previous to his publication [310]. This affords us a date of ſome importance; for it proves that the trade, opened by the Romans from Egypt to India direct, continued upon the ſame footing from the reign of Claudius and the diſcovery of Hippalus, almoſt down to the year 500 of our era; by which means we come within three hundred and fifty years of the Arabian Voyage publiſhed by Re-

[310] Montfaucon fixes the laſt date of Coſmas's publication in 535.

naudot,

naudot, and have but a ſmall interval between the limits of ancient geography and that of the moderns.

Sôpatrus, as his name teſtifies, was a Greek; and I have not yet met with the name of a ſingle Roman engaged in this trade[311]. Perhaps the jealouſy of the emperors, which did not allow Roman citizens to enter Egypt without permiſſion, had likewiſe forbidden them to embark in theſe fleets. But the intelligence derived from Sôpatrus is ſo perfectly conſiſtent with all that has hitherto been adduced, and ſo correſpondent to the Arabian accounts, which commence only three hundred and fifty years later, that it carries with it every mark of veracity that can be required. For Coſmas reports, from the teſtimony of Sôpatrus:

I. That the Tapróbana of the Greeks is the Sieli-diba of the Hindoos; that it lies beyond the Pepper Coaſt, or Malabar; and that there is a great number of ſmall iſlands [the Maldives] in its neighbourhood, which are ſupplied with freſh water, and produce the cocoa-nut in abundance. The cocoa-nuts he calls Argellia; and Argel, or Nargel, I am informed, is the Arabic name of the cocoa-palm tree. He adds, that it is nine hundred miles in length and breadth, which he deduces from a native meaſure of three hundred gaudia; but if gaudia are coſſes, his eſtimation of them is in exceſs; for three hundred coſſes are ſhort of five hundred miles—a computation too large indeed for the iſland, but ſtill more moderate than that of the geographers previous or ſubſequent.

II. He acquaints us next, that there were two kings on the iſland: one called the King of the Hyacinth[312], that is, the country above

[311] The freedman of Plocamus, who reached Ceylon in the reign of Claudius, was not a Roman, and Plocamus is not a Roman name: he was himſelf probably a libertus of Claudius.

[312] The ruby of Ceylon is proverbial. Paolino, dedication. Pliny, xxxvii. 41.

the

the Ghauts, where the ruby and other precious ſtones were found; and a ſecond king, poſſeſſed of the remainder, in which was the harbour and the mart, that is, the low country on the coaſt, where, in different ages, the Arabians, the Portugueſe, Dutch, and Engliſh, have been eſtabliſhed. On the coaſt alſo, he ſays, there were Chriſtians from Perſia, with a regular Chriſtian church, the prieſts and deacons of which were ordained in Perſia; that is, they were Neſtorians, whoſe catholicos reſided at Cteſiphon, and afterwards at Moſul: in fact, they were the ſame as the Malabar Chriſtians of St. Thomas, and occupied nearly the whole of the low country on the coaſt, while the native ſovereigns, above the Ghauts, were Hindoos.

III. Another particular we obtain is, that in the age of Sôpatrus, Ceylon was conſidered as the centre of commerce between China and the Gulph of Perſia and the Red Sea. The Chineſe he calls Tzinitzes [313]; a moſt remarkable term, expreſſing the natives of the Cheen, or Ma-cheen, of the Arabs; that is, either the peninſula of Malacca, or China itſelf; moſt probably the latter, becauſe he mentions the ſame particulars as Ptolemy and Pliny aſſign to the Seres; that they inhabit the country fartheſt to the eaſt, and that there is nothing but ſea beyond it.

IV. The commodities obtained from China, or other places eaſt of Ceylon, or found [314] there, are, ſilk [315] thread, aloes [316], cloves,

[313] Τζινίτζαι.

[314] Ὅσα κατὰ χώραν ἐισί.

[315] Μίταξιν, read μίταξαν.

[316] So Al Edriſſi: Aromata vero quæ in eodem Climate [Ceylon] reperiuntur, ſunt caryophilla, ſandalum, canfora, & lignum aloes, quorum omnium nihil invenitur in aliis climatibus. P. 38. But without any mention of cinnamon, though he notices the emerald and the ruby.

and ſandal-wood[317]. Theſe articles are exchanged with Malè, or the Pepper Coaſt; or with Kallíana [Tana], which ſupplies in return braſs, ſeſamum-wood[318], and cottons. Its commerce likewiſe extends to the Sindus, where the caſtor, muſk, and ſpikenard, are found; and to the gulph of Perſia, to the coaſt of Arabia, and to Adooli; while the ſeveral commodities of theſe countries are again exported from Ceylon to the Eaſt

V. We are next informed of the ſeveral ports of commerce, commencing from the Indus, in the following order: Sindus, O'rrotha[319], Kallíana, Sibor, and Malè; and if it might be permitted to interpret theſe Scindi, Surat, Bombay or Tana, Canara, and Malabar, the Periplûs would be in perfect correſpondence with Coſmas and Sôpatrus. In Malè, or Malabar, he adds, there are five ports where pepper may be procured—Parti, Mangarooth, Salo-patan, Nalo-patan, and Pooda-patan. Mangarooth is generally ſuppoſed to be Mangaloor; and the three Patans, or towns of Salo, Nalo, and Pooda, are ſo evidently Malabar names, that it is highly probable thoſe who are converſant in the native language of the coaſt may ſtill diſcover them, however they have been ſuperſeded by the more modern ports of Calicut, Cochin, or Coulan.

VI. After this follow ſome accounts, not equally correct or intelligible; for we are informed, that Sielidiba is five times twenty-four hours ſail from the continent; and that on the continent is

[317] Τζανδάραν.

[318] Σησαμινὰ ξύλα. What this article means I cannot ſay; but it is mentioned in the Periplûs alſo, and is poſſibly a corrupt reading in both.

[319] If we ſuppoſe Orrotha related to the Oopara of the Periplûs, it is moſt probably on the Tapti, and equivalent to Surat; but there is a part of Guzerat, near Diu, called Soret. Orrot and Sorret are nearly allied.

Marallo,

Marallo, producing [pearl] oyſters; with Kaber, that affords the alabandênon [330]. For Kaber and its produce, I have no interpretation. Marallo I ſhould have ſuppoſed to be Manar; but if it is upon the continent, it is Marawar. The five days [331] ſail may be ſoftened, by ſuppoſing the departure from the laſt port viſited in Malabar; but ſtanding as it does, it is erroneous.

VII. It is then mentioned that the king of Ceylon ſells elephants by their height; and an obſervation, that in India elephants are trained for war, while in Africa they are taken only for their ivory. This is true on the eaſtern coaſt; but the Ptolemies and Hannibal trained the African elephant for their armies. Another circumſtance is noticed, which continues true to this day; which is, that the importation of horſes from Perſia pays no duty. Ceſar Frederick mentions the ſame on the coaſt of Canara, in his time; and Hyder Alli had his agents diſperſed from the Indus to Arabia, to obtain a conſtant ſupply for his numerous cavalry. The horſe is ſaid not even to breed on the whole weſtern ſide of the peninſula; or if by accident a foal is dropped, it is worth nothing.

VIII. The laſt circumſtance I ſhall notice is, a conference between the king of Ceylon and Sôpatrus, in preſence of a Perſian, who had boaſted of the power of his ſovereign: "Well! Roman," ſays the king, "what have you to ſay?" "Look," replied Sôpratus, "at

[330] Voſſius reads ἀλαῖς ἀνδυὰ, which ſeems unintelligible; but he informs us it means nutmegs of Banda. We are, however, at preſent on the coaſt of Coromandel. Hoffman ſays, all merces barbaricæ are ſo called, as alſo toys and trifles.

[331]

Oneſicritus	- -	20 days.
Eratoſthenes	- -	7
Pliny	- - -	4 days.
Coſmas	- - -	5

The real diſtance, where the iſland approaches neareſt to the continent, is ſhort of 50 miles; from Cape Comorin to Columbo, about 180: both too ſhort for any of the ancient eſtimates.

" the coins of Rome and Perſia: that of the Roman emperor is of " gold, well wrought, ſplendid, and beautiful; while that of Perſia " is an ordinary ſilver drachma." The argument was concluſive; the Perſian was diſgraced, and Sôpatrus was placed upon an elephant and paraded through the city in triumph. Vain as this circumſtance may appear, two extraordinary particulars attend it; for the king's addreſs to Sôpatrus is, ROOMI [322], the term uſed in India to expreſs any inhabitant of thoſe countries which once formed the Roman empire; and the ſecond is, that the Perſians of that day actually had no gold [323] coin, while the coins of Byzantium were the pureſt and fineſt in the world.

But in addition to theſe various particulars, Coſmas has left alſo ſome traces of natural hiſtory that do credit to his veracity; for he deſcribes the cocoa-nut, with its properties; the pepper plant, the buffalo, the camelopard, the muſk animal, &c.; but the rhinoceros, he ſays, he only ſaw at a diſtance. The hippopotamus he never ſaw, but obtained only ſome of his teeth; and the unicorn he never ſaw,

[322] Ρωμεῦ. If Coſmas had not meant to give the very word of the Ceyloneſe, he would have written Ρωμαις. In India the Turks are called Roomi, as poſſeſſing Conſtantinople, the ſeat of the Roman emperors.

[323] I cannot help tranſcribing the paſſage as I found it by accident in Maſcou's Hiſtory of the Germans:

Monetam quidam argenteam Perſarum Rex arbitratu ſuo cudere conſuevit. Auream vero neque ipſi, neque alii cuipiam Barbarorum Regi, quamvis auri domino, vultu proprio ſignare licet. Quippe ejuſmodi moneta commercio vel ipſorum Barbarorum excluditur. Maſcou, vol. ii. p 98. from Procopius, lib. iii. cap. 33. See Coſmas alſo, p. 148.

The *excluſion* of the Perſian coin is the very circumſtance that took place upon this occaſion; and it ſhould ſeem, that as the Greek coins of Bactria, &c. had been current when the merchant of the Periplûs was at Barugáza, the Roman coin had now the preference, as the Imperial dollars, Venetian ſequins, and Spaniſh piaſtres, have had a ſuperiority in later times. For the purity of the Roman mint at Conſtantinople, ſee Clark on Coins.

I have ſeen the coins of the ſecond Perſian dynaſty in M. de Sacy's account of them, and if I recollect rightly, they have the head of the kings; but I do not remember whether they are all ſilver.

but

but as it was repreſented in braſs in the palace of the king of Abyſſinia. I mention theſe circumſtances to prove the fidelity of the traveller; for truth is as conſpicuous in what he did not, as in what he did ſee. And after this extract, ſelected out of his voluminous work, if nothing equally preciſe or ſatisfactory is to be collected out of the Arabian writers, or Oriental accounts of any ſort, let it not be deemed prejudice or partiality, if we prefer Greek or Roman authorities to all that can be found in any other ancient hiſtory whatſoever.

One part of the queſtion has, however, eluded all my inquiries; which is, that I have not found the mention of cinnamon, as a native [324] of Ceylon, in any author whatſoever. Iambûlus, Pliny, Dioſcórides, Ptolemy [325], the author of the Periplûs, and Coſmas, are all equally ſilent on this head, and all derive their cinnamon and caſia either from Arabia or Moſyllon, or more eſpecially from the Cinnamon Country, as they term it, on the eaſtern coaſt of Africa. That the ancients obtained the beſt and pureſt cinnamon, we know from their deſcription of it; and that beſt ſort grows no where but in Ceylon. That they might be deceived in regard to its origin, while they went only to Tyre, Sabêa, or the coaſt of Africa, is natural; but that they ſhould not recognize it in Ceylon, when ſome merchants went thither in the age of the Periplûs, and in all

[324] It is mentioned by Matthioli, and in the preface to Ribeyro's Hiſtory of Ceylon (Fr. ed.), that Strabo notices cinnamon from Ceylon. I have not found the paſſage; but at p. 63. I find the regio Cinnamomifera and Taprobana joined under the ſame parallel, which perhaps may have led to ſuch a ſuppoſition; and again, p. 72. but in the latter paſſage we have the produce of Taprobana -- ivory, tortoiſe-ſhell, and other articles; and here I ſhould have expected to find cinnamon, if the author had noticed it as a native of the iſland.

[325] The language of Ptolemy is preciſe: he ſays rice, honey, ginger, the beryl, the ruby, gold, ſilver, and all other metals, elephants and tigers, are found in Taprobana; but does not mention cinnamon. P. 179. Taprôbana.

ſucceeding ages down to the time of Sôpatrus and Coſmas, is unaccountable.

No voyagers, travellers, or writers, pretended to have viſited Ceylon perſonally, except Iambûlus and Sôpatrus. I know not how to excuſe even Sôpatrus, who was only once there caſually; but againſt Iambûlus, who aſſerted that he had reſided in Ceylon ſeven years, the charge of fiction is almoſt direct: no one could have been reſident ſo long, without ſeeing cinnamon, the ſtaple of the iſland; and that if he had ſeen it, he ſhould not have recorded it among the other particulars he detailed, is incredible; for the curioſity of Greece and Egypt was as much alive to this inquiry, as to any one that regarded the produce of the Eaſt.

Dioſcórides [326] and Galen knew it not. Dionyſius, who lived under Auguſtus, preſerves the fable of Heródotus, that birds brought it from uninhabited iſlands. I do not pretend to have explored the whole range of antiquity on this ſubject; but the firſt mention of cinnamon, as the produce of Ceylon, that has occurred to me, is in the Scholiaſt [327] of Dionyſius on this very paſſage. Whether that circumſtance

[326] See Matthioli on Dioſcorides, lib. i. capp. 12, 13. and p. 44. where the caſia (our cinnamon) is ſaid to come from Arabia, and the ancient cinnamon, or ſprig of the tree, from Moſyllon. Caſia is deſcribed by Theophraſtus 370 years prior to Dioſcorides; and by Heródotus, in ſome degree. Strabo ſays, Arabia produces caſia, cinnamon, and nard. P. 783. Matthioli adds, p. 46. that Strabo likewiſe ſays, cinnamon comes from the ſouthern parts of India; but I have not yet met with the paſſage. Pliny follows Theophraſtus. See alſo the curious account (p. 45.) that Galen gives of the cinnamon in poſſeſſion of Trajan, Adrian, Antoninus, Commodus, and Severus; in all which accounts not a word is found reſpecting its origin from Ceylon: thoſe who would examine it, as now cultivated in that iſland, may conſult Thunberg, vol. iv. 199.

[327] Ὄρνιθες δ' ἐτίρωθεν ἀκοκίτων ἀπὸ νήσων Ἤλθον φύλλα φέροντες ἀκηρασίων κινναμώμων. Birds brought from uninhabited iſlands the leaves [rolls] of unadulterated cinnamon. Upon this the Scholiaſt writes . . . ἀκοκίτων νήσων ἤγουν τῶν περὶ Ταπροβάνην. I conclude from this paſſage, that the Scholia are not by Euſtathius; for the expreſſion here is preciſe. But Euſtathius writes

circumſtance will prove the early date of that knowledge, or the low date of the Scholiaſt, muſt be left for others to determine. Sir William Jones has taken ample notice of this obſcurity, and remarks upon the Cinnamon Country of the ancients in Africa, the limit of their geography to the ſouth, that it does not produce a ſingle ſpecimen of this article in the preſent age, or in any former age, which can be aſcertained. Baſtard cinnamon is found in Malabar, and true cinnamon, though of an inferior quality, in Sumatra; perhaps alſo in other iſlands farther to the eaſt; but that the beſt growth has been conſtantly in Ceylon, from all the evidence before us, is undeniable.

The ſpice we now have, which is the kaſia of the ancients, was certainly *procured* in Africa; and the teſtimony of the Periplûs is direct [328], that it *grew* there. I ſtate this with all its difficulties, which I cannot ſolve; but as there was a voyage conſtantly performed, from Barugáza to Africa, previous to the Greeks having any knowledge of ſuch an intercourſe, the only poſſible ſolution to be imagined is, that the merchants engaged in this commerce kept the ſecret to themſelves: they imported it at Barugáza from Ceylon, and exported it to Sabêa, where it was firſt found by the traders from Egypt, by Solomon, and the Tyrians; and in a later age, to the ports of Africa, where they dealt immediately with the Greeks, without ſuffering by the monopoly of the Sabêans. How ſuch a

writes, ἀπὸ νήσων . . . τῶν περὶ τὸ Ἐρυθραῖον τάχα and the Commentary of Euſtathius, p. 267. πέλαγος; that is, the iſlands in the Erythrean Sea, which is general.

It is not unworthy of remark, that theſe birds of the poet attend Bacchus at his birth, in conformity with Heródotus; and their appearance ſeems likewiſe to be in Arabia, from the context. See Dionyſii Perieg. lin. 944. ed. Ox. 1697, where the Scholiaſt is deſcribed, Paraphraſis veteris Scholiaſtæ ex codice MS. nunc primum eruta.

[328] Periplûs, p. 8. Ἐν αὐτῇ γεννᾶται Κασσία. And again, γίνεται ἐν αὐτῇ Κασσία. And both verbs appear preciſe; for the imports from the Eaſt are ſpecified ſeparately.

ſecret

ſecret could be kept ſo long a time, or how the Greeks could be perſuaded that kaſia grew in Africa, is, with ſuch lights as we have, inſcrutable; but that it was not the produce of Africa, the general ſuffrage of all modern voyagers and merchants is ſufficient to prove.

One circumſtance worthy of remark is ſtill to be conſidered; which is, that the merchant of the Periplûs mentions kaſia only, and never cinnamon. Cinnamon, as we have learnt from Galen, was a preſent for kings and emperors; but the kaſia, the canna ſiſtula, or pipe cinnamon, which we now have, was the only article of merchandize in that age, as it ſtill continues. And now that Ceylon is in the hands of the Engliſh, it would be no difficult matter to obtain the tender ſpray of the four principal ſorts noticed by Thunberg, and compare them with the accounts of Theophraſtus, Dioſcórides, and Galen. As the ſpecies which we have anſwer to their kaſia, it is highly probable that the ſpray would anſwer to their cinnamon; for that both were from the ſame plant, or from different ſpecies of the ſame, there can be little doubt, as Galen acquaints us, that in the compoſition of medicines a double [329] portion of kaſia anſwered the ſame purpoſe as a ſingle one of cinnamon; and that both entered into the theriac which he prepared for the emperor Severus.

Such is the account that has appeared neceſſary to be ſtated relative to the ancient ſituation of this celebrated iſland. The modern hiſtory of it may be obtained from Baldeus, Valentine, Knox, Ribeyro, Harris, Hugh Boyd [330], Le Beck; Captains Mahoney, Colin

[329] Matthioli, p. 47.

[330] Mahony's, Le Beck's, and M'Kenzie's Narratives, are in the Aſiatic Reſearches, vol. vi. p. 425. vol. v. p. 393. and vol. vii. p. 32.; H. Boyd's, in the Ind. An. Regiſter 1799. they are all valuable, and worth conſulting.

M'Kenſie,

M'Kenſie, and Percival. And I cannot conclude my commentary on the Periplûs without pleaſure from the reflection, that the valuable commerce of this iſland is now in the poſſeſſion of Britain; or without expreſſing a moſt anxious wiſh, that the country deemed a terreſtrial Paradiſe by the Oriental writers—the repoſitory of cinnamon, cloves, betel, camphor, gold, ſilver, pearls, rubies, and the other moſt precious commodities of the world—may find protection, happineſs, and ſecurity, under the Britiſh government. And may the expulſion of the Mahomedans, Portugueſe, and Hollanders, be an admonition to us, that conqueſt obtained by arms can alone be rendered permanent by equity, juſtice, and moderation!

SEQUEL

TO THE

PERIPLUS OF THE ERYTHREAN SEA.

THE firſt [1] place that ſucceeds after leaving Kolkhi, is the Bay A'rgalus [2], connected with a diſtrict inland [of the ſame name]. Here, and here only, all the pearls obtained in the fiſhery at the iſland of Epiodorus [3] are [4] [allowed to be] perforated (*a*) [and prepared for market]. Here alſo are to be purchaſed the fine muſlins called Ebargeitides (*b*).

Proceeding

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(*a*) This would be in the modern diſtrict of Marawar, poſſibly the Marallo of Coſmas: Tutacorin, the place where the market is now kept, and the pearls taxed, is in Tinivelli, weſt of Rami-ceram. The earlieſt modern accounts agree in Tutacorin, while the power was in the native government; the Portugueſe, Dutch, and Engliſh, have continued it there. Both Provinces, in the age of the Periplûs, were in the kingdom of Pandíon; and the Bay of A'rgalus was nearer Mádura, the capital, than Kolkhi, or Soſikoorè. This was a ſufficient reaſon why the market ſhould be rather on the eaſt, than the weſt ſide of Rami-ceram.

(*b*) Salmaſius reads Σίνδονες μαργαρίτιδες, muſlins ſprinkled with pearls. Hudſon, & Plin. Ex. 1173. which, notwithſtanding the pearls bored at Argalus, ſeems highly dubious.

NOTES.

[1] Πρότερος ἀργαλὸς ἐν κόλπῳ κείμενος.

[2] Written in Ptolemy,
Sinus Orgalicus,
Sinus Agaricus,
Sinus Argaricus.

[3] Manar.

[4] Περονῶται is the reading of Salmaſius, which ought rather to be πεφορᾶται. The text ſtands τιρονῶται, for which, perhaps, τιρεῶται might be ſubſtituted. But perforation is manifeſtly intended, be the reading what it may.

Proceeding from hence, the moſt conſpicuous of all the marts and anchorages on the coaſt are Kámara (*c*), Podooka, and Sôpatma. To theſe the traders from Limúrikè [5], and the other provinces north [6] of Limúrikè, reſort; and in theſe marts are found the native veſſels which

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dubious. If we were to examine a catalogue of muſlins at an India ſale, we ſhould find many names more ſtrange than Ebargeitides, derived either from the manufactures, or the place where procured.

(*c*) Where to fix any of theſe three places is mere conjecture; our courſe is ſtill eaſt, according to the Periplûs; but if Kamara be the Chaberis Emporium of Ptolemy, as Mercator ſuppoſes, his Podooka is ſtill higher up the coaſt, and our courſe ought to be north-eaſt; and if his Manarpha be Maliarpha, or Meliapoor, *that* place is the St. Thomè of Madras; in which caſe Podooka muſt be fixed ſomewhere on the coaſt between the Cavery and Madras, but where, it is impoſſible to determine. Sopatma is not noticed by Ptolemy. Soro-patma would be the town of the Soræ, with ſome alluſion to the Soræ of Ptolemy and to Coromandel; but it is all conjecture; and yet, notwithſtanding this obſcurity, we have manifeſtly a trade here deſcribed, regularly carried on by native traders, between Malabar and Coromandel, without the leaſt notice of Greeks being concerned in it. We have an account that the ſpecie brought by the Greeks to Canara, finally ſettled on the other ſide of the peninſula; and as we know that in all ages the commerce of India cannot be carried on without ſpecie, ſo we ſee here its regular progreſs to the eaſtward. We are informed alſo, that the exports of Egypt to Canara, and the produce of Canara itſelf, went by the ſame conveyance to Coromandel; and that the principal articles in return were the muſlins, as they are at this day: the merchants from Guzerat and Concan partook in this trade, and poſſibly thoſe from Scindi. In the whole of this, without being able to ſpecify particular places, we have a general picture of Indian commerce, ſo conformable to the accounts of the Arabs, and of the Portugueſe upon their firſt arrival on the coaſt, that we want no further evidence to perſuade us, that the commerce of India was as vigorous antecedent to hiſtory, as it is ſtated at the moment that hiſtory commences. The different ſorts of veſſels conſtructed in theſe ports are likewiſe correſpondent to modern accounts: the monoxýla are ſtill in

NOTES.

[5] Canara. [6] Barugáza or Guzerat, Aríakè or Cóncan.

which make coaſting voyages to Limúrikè—the monoxýla of the largeſt ſort, called ſangara, and others ſtyled colandiophônta, which are veſſels of great bulk, and adapted to the voyages made to the Ganges and the Golden Cherſoneſe.

To

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in uſe, not canoes, as they are ſometimes improperly rendered; but with their foundation formed of a ſingle timber, hollowed, and then raiſed with tiers of planking till they will contain 100 or 150 men. Veſſels of this ſort are employed in the intercourſe between the two coaſts; but the kolandiophônta, built for the trade to Malacca, perhaps to China, were exceedingly large and ſtout, reſembling probably thoſe deſcribed by Marco Polo and Nicola di Conti. Barthema likewiſe mentions veſſels of this ſort at Tarnaſari (Maſulipatam?), that were of 1000 tons (dolia?) burthen (lib. vi. c. 12. Grynæus), deſigned for this very trade to Malacca. This is the more remarkable, as d'Anville fixes the Mæſolia of Ptolemy at Maſulipatam; and Ptolemy's point of departure for Khrusè, or Malacca, at the Godavery, twenty-ſix leagues only to the north. From theſe circumſtances there is great reaſon to conclude that he is right; for Barthema had come from the Straits of Manar to Puleachat, north of Madras, and then proceeded to Tarnaſari, where he embarked for Bengal, Pegu, and Malàcca. How extraordinary, then, is the correſpondence of the Periplûs with the modern courſe of theſe navigators, from the Straits of Manar to the Carnatic! and from the Carnatic, paſſing the wild tribes of Oriſſa (ſtill ſavage) between the Godavery and the Ganges; and then proceeding to Malacca, or the Golden Cherſoneſe! Still however, with all this accuracy, he is in the ſame error with Ptolemy, carrying the whole courſe eaſt till he reaches Dêſarênè or Oriſſa, and then giving it a northerly direction to the Ganges.

The other veſſels employed on the coaſt of Malabar, as Trappaga and Kotumba, it is not neceſſary to deſcribe: they have ſtill in the Eaſtern Ocean germs, trankees, dows, grabs, galivats, praams, junks, champans, &c. names which have all been adopted by the Europeans, and which it is no more requiſite to diſtinguiſh, than to explain our own brigs, ſnows, ſchooners, ſloops, or cutters, to the Hindoos. But the mariners aboard the Indian veſſels I have looked for in vain: neither Greeks or Arabs are mentioned; but as the manners and religion of the Hindoos exclude not foreigners from their country, it may be preſumed that their ſeamen were always foreigners, poſſibly Malays, or even Chineſe; for that the Hindoos themſelves never uſed the ſea, is almoſt indubitable. The whole voyage appears to have been made

To theſe marts likewiſe are brought all the articles prepared [in Egypt] for the market of Limúrikè; and almoſt all the ſpecie, of which Egypt is continually drained by its trade with Limúrikè, finally centres in this coaſt [8], as well as all the produce of Limúrikè itſelf.

From the coaſt [9], as the courſe of the navigators tends to the eaſt round the countries which ſucceed, the iſland, now called Palaiſimoondus, but formerly Taprobana, lies out in the *open* [10] ſea to the weſt (*d*); the northern part of which is civilized, and frequented by veſſels

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by coaſting, and ſo it continued when we firſt meet with Arabs in theſe ſeas; which is the more remarkable, as the monſoon was known, and made uſe of between Africa and India; and the ſame monſoon prevails to the eaſt, as well as to the weſt of Cape Comorin.

I do not find the Tarnaſari of Barthema in the modern maps: it might lie between Puleachat and Bengal. But the peculiarity is, that there is an iſland Tanaſeram on the coaſt of Siam, and the great river ſo called. Tana-ſeram is Regio Deliciarum. Voſſius ad Melam, lib. iii. 7.

Mr. Marſden mentions the veſſels that come regularly from Telingana, between the Godavery and Kiſtna, to Acheen, at this day. This tract anſwers ſufficiently for the port aſſumed by Ptolemy, for the paſſage to Khrusè, and for the Tarnaſari of Barthema; but does not determine the ſituation: it ſeems, however, to beſpeak the ſame trade. Marſden's Sumatra, p. 312.

(*d*) The better knowledge of this paſſage which I have now obtained, obliges me to recall the argument which I had advanced on the meaning of δύσιν, in the diſſertation on Εισπλοιομμισθοσίας, p. 17. I now underſtand that the iſland lies to the *weſt* as you ſail to the *eaſt* from Ceylon.

NOTES.

[7] Εἰς τὴν Λιμυρικὴν ἐργαζόμενα, quæ in Limyrica elaborantur. Hudſon. But then it ſhould be ἐν τῇ Λιμυρικῇ.

[8] Χρῆμα. Res præterea omnis generis. Hudſon. But χρῆμα is uſed repeatedly in the Periplûs for ſpecie.

[9] Παραλία, the *coaſt* of Coromandel, in contraſt to the Παραλία, or *coaſt* of Malabar. In Ptolemy, Paralia Sore-tanum; and Sore is Core, Coro-mandel. Coro-mandalam of Paolino, the Millet Country. See d'Anville, Antiq. 127.

[10] Εἰς πέλαγος ἐκκεινται.

veſſels equipped with maſts (*e*) and ſails. The iſland itſelf [is ſo large, that it] extends almoſt to the oppoſite coaſt of Azania [in Africa]. Here pearls, precious " ſtones, fine muſlins, and tortoiſe-ſhell, are to be obtained.

[But returning now to the coaſt, above Kámara, Podooka, and Sopatma, lies] Maſalia, a diſtrict which extends far inland. In this country a great quantity of the fineſt muſlins are manufactured [12]. And from Maſalia the courſe lies eaſtward, acroſs a bay, to Dêſarênè, where the ivory is procured of that ſpecies [13] called Bôſarè.

Leaving

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(*e*) Ἰστιοπεποιημένοις. I conclude that this means, they were veſſels adapted to diſtant voyages, eaſt or weſt, in contradiſtinction to the ſangara and monoxýla, employed only on the coaſt; and the text of Strabo confirms this opinion: Ταπροβάνην . . . διέχειν δὲ τῆς ἠπείρου πλοῖν ἡμερῶν εἴκοσι, ἀλλὰ κακοπλοεῖν τὰς νεῦς, φαύλως μὲν ἰστιοπεποιημένας, κατεσκευασμένας δὲ ἀμφοτέρωθεν ἐγκοιλίων μητρῶν χωρίς. The veſſels here meant are the monoxýla, built from the bottom without ribs, ill equipped with ſails, and heavy ſailers. In theſe veſſels it was twenty days ſail from the continent to Ceylon, but in others only ſeven: both diſtances are in exceſs, but they are palliated by Voſſius, who ſuppoſes the diſtance to be meaſured from Covalam in Travancoor, to Pointe du Galle in Ceylon, as Pliny places the port of Ceylon on the ſouth ſide of the iſland. Pliny has likewiſe a reference to Strabo, when he ſpeaks of twenty days ſail from the Praſii to Ceylon, in the paper-ſhips ofEgypt, and ſeven in the Greek veſſels. Praſii is evidently a corrupt reading; and how far paper-ſhips, or ſhips compoſed of the biblos, ſhould venture on theſe voyages, is dubious. That they were uſed on the Nile is true: Radicibus papyri incolæ pro ligno utuntur. Ex ipſo quidem papyro navigia conſerunt. (Plin. lib. xiii. 2. & v. 22. See Salmaſ. 1110.) It is likewiſe to be noticed, that Ἰστιοπεποιημένοις is a reading of Salmaſius for πλοναχισίνι, in the Baſil edition; but Voſſius reads it τὸ πλεῖον ἰκοστίνῃ, *they perform it generally in twenty days*. This correction accords with Pliny, and approaches nearer to the text, corrupted as it ſtands; in fact, Salmaſius takes Ἰστιοπεποιημένοις from Strabo, and Voſſius ἡμερῶν ἴκοσι.

NOTES.

[11] Tranſparent.

[12] Ἰνόντας.

[13] The Arabs of Renaudot mention the rhinoceros, or karkandam, in the ſame country. P. 17.

Leaving Dêsarênè the courſe is northerly, paſſing a variety of barbarous tribes; one of which is ſtyled Kirrhádæ, a ſavage race, with noſes flattened to the face. Another tribe are the Bargooſi; and others (*f*), diſtinguiſhed by the projection of the face like that of the horſe, or by its length [14] from the forehead to the chin; both which tribes are ſaid to be cannibals.

After paſſing theſe, the courſe turns again to the eaſt, and ſailing with the coaſt on the left, and the ſea on the right, you arrive at the Ganges, and the extremity of the continent towards the eaſt, called Khrusè [or the Golden Cherſoneſe].

The Ganges is the largeſt river of India; it has an annual increaſe and decreaſe, like (*g*) the Nile; and there is a mart on it of the ſame name, through which paſſes a conſiderable traffic, conſiſting of the Gangetic (*h*) ſpikenard, the Gangetic muſlins, which are the fineſt manufacture of the ſort, pearls, and betel.

In this province alſo there is ſaid to be a gold mine, and a gold coin called Kaltis (*i*).

Immediately

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(*f*) Whenever an author arrives at the Country of Monſters and Anthropophagi, I conclude he is at the end of his knowledge: anthropophagi, however, there are ſtill ſaid to be in the Andaman Iſlands, and the fact is certainly proved in New Zealand; but the varieties of the human ſpecies, with horſes' heads, with tails, or with heads which grow beneath their ſhoulders, ſtill remain to be diſcovered. Of the Kirrhadæ, or Dêſarênè, I have found nothing; but I place the latter in Oriſſa. The ivory called Boſare may be the horn of the rhinoceros, much coveted in the Eaſt, and the animal is ſometimes called Βᾶς μονόκερως, Bos unicornis.

(*g*) The ſolſtitial rains produce the ſame effect on both rivers.

(*h*) See the catalogue. Νάρδος, the regular importation of this odour, is from the Ganges or Bengal, whither it is to this day brought from Thibet.

(*i*) We have no account of a gold mine; but a gold coin called Kalteen, or Karteen, is ſtill known in Bengal. Aſ. Reſ. vol. v. p. 269.

NOTE.

[14] Ἱππιοπροσώπους, μακροπροσώπους.

Immediately after leaving the Ganges, there is an iſland in the ocean called Khrusè (*k*) or the Golden [15] Iſle, which lies directly under the riſing ſun, and at the extremity of the world towards the eaſt. This iſland produces the fineſt tortoiſe-ſhell that is found throughout the whole of the Erythrêan Sea.

But ſtill beyond this, immediately under the north (*l*), at a certain point [16] where the exterior ſea terminates [17], lies a city called Thina,

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(*k*) Khrusè is mentioned as an iſland by Mela, Dionyſius, &c. as a Cherſoneſe by Ptolemy. It may be Ava, Pegu, or Siam, for they were all oſtentatious of gold; but, placed as it is here, next to the Ganges [κατ' αὐτὸν τὸν ποταμὸν], its poſition muſt be erroneous. Ptolemy is more correct in fixing the Kirrhádæ in this ſituation, whom our author mentions previous to the Ganges; for Kirrhádæ bears ſome reſemblance to the Hidrange or Kadrange of the Arabs, which ſeems to be Arracan; and if Arracan may be extended to comprehend the little diſtrict of Chitagong, it is contiguous to the Ganges, or rather to the Megna. Ptolemy adds, that the beſt betel is procurable in this province (ſee Diſſertation); and it is from hence that the Seſatæ, or Bêſadæ, who are the Tartars of Laſſa or Thibet, carry that article to the northern provinces of China.

(*l*) This ſtrange paſſage I have rendered literally, but it is unintelligible without a comment. [*Under the north*] implies the ſame as is repeated afterwards, *under the Leſſer Bear*. [Where the ſea *terminates outwards*] intimates the exiſtence of a circumambient ocean, like the Mare Tenebroſum of the Arabian geographers; to comprehend which, we muſt imagine the Golden Cherſoneſe the laſt region eaſt of the *known* world; but ſtill that there is an ocean beyond it, ſurrounding the whole earth, and that Thina lies inland, in a country that is waſhed by this ocean. This notion, entangled as it is by an erroneous ſituation, and confuſed expreſſion, ſtill intimates, in accordance with Mela and Pliny, that Thina is the laſt country of the known world, and that there is nothing beyond it but the ſea. If the author had an idea of a ſphere, this ſea would extend to Spain, which is Strabo's conception; if he thought the earth a flat ſurface, this ſea is the ocean that ſurrounds it.

NOTES.

[15] The Golden Continent and the Golden Iſland are evidently diſtinct here, as the Golden Province and Golden Cherſoneſe are in Ptolemy.

[16] Εἰς Σινῶν τινα τόπον. Σινῶν is an inſertion of Salmaſius's.

[17] The Mare Tenebroſum of the Arabs.

Thina [18], not on the coaſt, but inland; from which both the raw material [19] and manufactured ſilk are brought by land, through Bactria, to Barugáza, or elſe down the Ganges [to Bengal], and thence by ſea to Limúrikè, or the coaſt of Malabar (*m*).

To Thina itſelf the means of approach are very difficult; and from Thina ſome few [merchants] come, but very rarely; for it lies [very far remote] under the conſtellation of the Leſſer Bear (*n*), and is ſaid to join the confines of the Euxine Sea, the Caſpian, and the Lake Mêôtis (*o*), which iſſues at the ſame mouth with the Caſpian into the Northern [20] Ocean.

On the confines, however, of Thina, an annual fair or mart is eſtabliſhed; for the Sêſatæ, who are a wild, uncivilized tribe, aſſemble there with their wives and children. They are deſcribed as a race (*p*) of men, ſquat and thick [21] ſet, with their face broad, and their

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(*m*) See the Diſſertation. All that went by land to Bactria, paſſed down the Indus to Guzerat; all that came through Thibet or Laſſa, paſſed down the Ganges or Brama Putra to Bengal.

(*n*) See the Diſſertation.

(*o*) For this inconſiſtency conſult the Diſſertation.

(*p*) If theſe Sêſatæ are the Bêſadæ of Ptolemy, which is generally allowed by the commentators from the attributes aſſigned to them by both, the Bêſadæ of Ptolemy are placed north of Kirrhádia or Arracan, and correſpond very well with the Tartars of Laſſa, who might naturally be the carriers between China and Bengal. But why the betel-leaf ſhould be carried in this form from Arracan to China, in order to be made

NOTES.

[18] . . . . Τῶν Σινῶν ἐστὶν ἔθνος, καὶ ἡ τούτων Μητρόπολις, ἥτις Θεῖναι προσαγορεύεται· ὅρος ἐστὶ γνωσμένης γῆς καὶ ἀγνώστου τυγχάνουσα. Marcian Heracl. Hudſon, p. 14.

Theinæ, the capital of the Sinæ, is the boundary between the known and unknown part of the world.

In this Marcian is more perſpicuous than Ptolemy, whom he uſually follows.

[19] Τὸ ἔριον.

[20] Τοῖς ἀπιστραμμένοις μέρεσι.

[21] Κολοβὸι.

their noſe greatly depreſſed. The articles they bring for trade are of great bulk, and enveloped in mats [22] or ſacks, which in their outward appearance reſemble the early leaves of the vine. Their place of aſſembly is between their own borders and thoſe of Thina; and here ſpreading out their mats [on which they exhibit their goods for ſale], they hold a feaſt [23] [or fair] for ſeveral days, and at the concluſion of it, return to their own country in the interior.

Upon their retreat, the Thinæ, who have continued on the watch, repair to the ſpot, and collect the mats which the ſtrangers left behind at their departure: from theſe they pick out the haulm, which is called PETROS, and drawing out the fibres, ſpread the leaves double, and make them up into balls, and then paſs the fibres through them. Of theſe balls there are three ſorts—the [24] large, the middle-ſized, and the ſmall: in this form they take the name of Malábathrum; and under this denomination, the three ſorts of that

REMARKS.

made up with the Areka nut, and then returned to India by the Chineſe under the denomination of Malábathrum, is difficult to comprehend. The diſtinction between the leaf and the nut ſeems to be preſerved in petros and malábathrum; for that petros is the betel, or betre, cannot well be doubted, when it is deſcribed as reſembling the young leaves of the vine; for the betel is a delicate ſpecies of the pepper-plant, and that plant is almoſt conſtantly deſcribed as ſimilar to the vine.—The deſcription of the Sêſatæ leaves little room to doubt that they are Tartars; and we have here, upon the whole, a deſcription of that mode of traffic which has always been adopted by the Chineſe, and by which they to this hour trade with Ruſſia, Thibet, and Ava. See the Diſſertation.

NOTES.

[22] Ταρπώιαις, ſirpeis, literally mats made of ruſhes.

[23] The word, in the original edition, was ἁρπάζουσιν; for which Salmaſius reads ὁρτάζουσιν. I propoſe ἀγοράζουσιν, they deal or traffic.

[24] Ἀδρόσφαιρον, μετόσφαιρον, μικρόσφαιρον.—— Theſe terms are applied by Pliny to the ſpikenard. Lib. xii. c. 26. The ſpikenard was conſidered ſpecifically as *the leaf*; how erroneouſly, may be ſeen in the catalogue. Hence it became confounded with the betel *leaf*, always uſed with the Areka *nut*.

that maſticatory are brought into India by thoſe who prepare (*q*) them [25].

All the regions beyond this [towards the north] are unexplored, either on account of the ſeverity of the winter, the continuance of the froſt, or the difficulties of the country; perhaps alſo the will of the gods has fixed theſe limits to the curioſity of man.

REMARK.

(*q*) Ὑπὸ τῶν κατεργαζομένων αὐτὰ. Thoſe who manufacture them—who are theſe but the Sinæ? If I had found that the Chineſe brought them by ſea, as they did to Ceylon in the time of Coſmas, my evidence for the performance of the voyage, either to or from China, would have been complete; but on this ſlender ground I dare not aſſert it, nor do I think it probable, for the betel might come down the Ganges as well as ſilk. The whole ſeems to be in irremediable confuſion, with particulars founded on truth, and a total that is inconſiſtent.

NOTE.

[25] Ὑπὸ τῶν κατεργαζομένων, rendered by Salmaſius, Thoſe who finiſh them, or make them up for exportation.

DISSERTATION I.

ON THE SINÆ, THE SÊRES, AND THE TERMINATION OF ANCIENT GEOGRAPHY ON THE EAST.

I. *The Name of China.*—II. *Sinæ of Ptolemy in Siam, Sinæ of other Authors, and Sêres the ſame; Periplûs, Eratoſthenes, Mela, d'Anville.*—III. *Relative Situation of the Seres, with reſpect to Scythia, and India beyond the Ganges.*—IV. *Capital, Sera Metropolis.*—V. *Seres diſtinguiſhed as Manufacturers of Silk.*—VI. *Intercourſe between China, India, and Europe; Route from Ptolemy, Maes the Macedonian.*—VII. *Modern Route—Marco Polo, Rubruquis, Carpin, Goez.*—VIII. *Route of the Séſatæ from Arracan to China—Dionyſius Periegetes.*—IX. *Intercourſe by Sea—Mela, Rajah of Pliny, Coſmas Indicopleuſtes.*—X. *Golden Cherſoneſe, Voyage from Ceylon thither, Coaſt of Coromandel, Maſulipatam, Ganges, Arracan, Ava, Siam, Cattigara.*—XI. *Longitudes and Latitudes of Ptolemy, however in Exceſs, ſtill the Cauſe of modern Diſcovery; Navigation towards the Weſt from Spain—Roger Bacon, Columbus, Map of Ptolemy; Eulogy of Ptolemy.*

I. THINA, Sinæ, and Tziniſtæ [1], ſo nearly reſemble China and the Chineſe, that upon the firſt view of theſe appellations, we are naturally led to conclude that they are the ſame. Serica alſo,

[1] Tzina, and Tzinitzæ, and Tziniſtæ, are the orthography of Coſmas Indicopleuſtes, and approach as nearly to China and the Chineſe, as Greek letters can; and of the country meant there can be no doubt; for he mentions the ſilk brought by land from that country

alſo, the Country of the Seres, which produces the ſilk, and the only country which originally produced it, is ſo pre-eminently and characteriſtically the ſame country, that if Ptolemy had not aſſigned two different poſitions for the Sinæ and the Sêres, there would probably have been no diſpute upon the queſtion at the preſent hour.

But it is ſaid, the Chineſe themſelves know nothing of this name. This, however, is of little weight in the ſubject of our inquiry; for the ſame nation in Europe which we call Germans, are ſtyled Almains by the French, and Teutſch [2], or Teudeſch, by themſelves. The Jeſuits who were in China have, however, endeavoured to find an approach to this ſound in Tan-djin, Han-djin, the people of Tan [3] or Han, two of their early dynaſties; and in Chen-ſi, one of the principal provinces: but upon theſe ſimilarities there is little dependance; for it is generally allowed, that the principal native appellation is Tchou-koue [4], the Central Kingdom; and every nation in the world, from vanity, from relation to all the regions around, or from ignorance, is entitled to the ſame diſtinction.

But let us firſt inquire, how this name was brought weſtward? Manifeſtly not by the north, or by land, for the name obtained by that conveyance was Kathay and Kitai; but by ſea it was firſt heard of—by the Macedonians, in the form of Thina; by Coſmas, in the form of Tziniſtæ; by the Arabs [5], as Cheen, or rather Ma-cheen,

country to Perſia, 4500 miles; but he ſays, the paſſage by ſea is much longer. And then adds, Περαιτέρω δὲ Τζινίστας οὐδὲ πλέεται οὐδὲ οἰκεῖται. Beyond the Tzinistæ there is no navigation, or habitable country. Montfaucon, Nov. Col. Patrum, tom. ii. p. 138. See infra, No. 8.

[2] And hence Dutch in our own language.

[3] D'Anville, Antiq. de l'Inde, p. 179.

[4] Other names occur in Iſbrandt Ides, the Jeſuits' Accounts, &c. &c.

[5] Primi Arabes Seras cum Sinis confuderunt quorum errorum poſtea ſecuti ſunt alii. Voſſius ad Melam, lib. i. c. 2. note 20.

Great

Great Cheen, or Cheena; and by Marco Polo, as Cin, that is Cheen in the mouth of an Italian. The Portugueſe likewiſe, who came from the Weſt, acquired the ſame ſound in their progreſs towards the Eaſt; and from them Cheena, or China, has deſcended to all the nations of Europe.

Cheen [6] therefore, by all theſe ſeveral navigators, was obtained as they advanced towards the Eaſt; and the firſt country that bears the reſemblance of the ſound is Cochin-china, called by the natives, and by the Chineſe, Kao-tchii-chin; by the Jeſuits, Tchen-tchen; and by the Arabs, Cheen; the Sinia Sinarum of Al Edriſſi. If then we reflect that all the kingdoms contained in the Great Cherſoneſe, except Malacca [7], partake of Chineſe manners, habits, policy, and government, it was a natural conſequence that the Arabs, when they firſt reached China, the ſuperior and ſometimes the ſovereign of them all, ſhould receive the name of Ma-cheen, or Great China, in compariſon with theſe inferior kingdoms.

It is impoſſible to prove that theſe appellations are as ancient as the era of Alexander, becauſe hiſtory is ſilent; but the acquiſition of the ſame ſound by all the nations which advanced by ſea from the Weſt towards the Eaſt, from the time of Alexander to the date of the Portugueſe diſcoveries, is a ſtrong preſumption in its favour.

The firſt mention of Thina by the Greeks, is in the Treatiſe of Ariſtotle [8] de Mundo (if that work be his); but the full notice of it is by Eratóſthenes, and as Eratóſthenes lived under the ſecond

[6] Marco Polo ſays, Mangi is called Chin in Zipanga, or Japan. This may be an error, for Marco never was in Japan; but it is a proof that Mangi was called Chin in his age. Lib. iii. c. 4.

[7] The Malays are ſuppoſed to be originally Chineſe by Barrow, but their language is alphabetical.

[8] Ariſtotle died A. C. 322; Eratoſthenes born 276.

Ptolemy,

Ptolemy, his mention of Thina is early enough to ſuppoſe, that the Greeks had no knowledge of ſo diſtant a region before Alexander, and knew it then only in conſequence of his expedition.

Though the Macedonians proceeded no farther eaſt than the Indus, they certainly acquired a knowledge of the Ganges and Ceylon: this we learn from hiſtory; and if their inquiries went farther, they had Perſians, Indians, and Arabians, in their army, from whoſe report they might gratify their curioſity. If Ariſtotle, therefore, had heard of Thina, this muſt be the ſource of his knowledge; or if the Treatiſe imputed to him be not his, the knowledge of Eratóſthenes muſt have been acquired, either from the ſame ſource, or from thoſe who ſailed on board the fleets from Egypt, and met the Arabian, Indian, or Perſian merchants in the ports of Sabêa.

Let us ſuppoſe, then, that the whole of this was report, and let us conjecture from analogy by what we know, in a later age, to be fact. It would amount to this—that there was a trade between Arabia and India, carried on every year; that the merchants from Arabia met others on the weſtern coaſt of India, who came from the eaſtern coaſt; that thoſe on the eaſtern coaſt traded to a country ſtill further eaſt, called the Golden Cherſoneſe; and that from the Golden Cherſoneſe there was another voyage ſtill to the eaſt, which terminated at Thina; and that beyond Thina there was no proceeding farther, for it was bounded[9] by the ocean which had never been explored.

A report, coming through no leſs than five intermediate channels, like this, would doubtleſs be loaded with much error, fable, and

[9] In this, Mela, Pliny, Dionyſius, Coſmas, and the Periplûs, are all agreed.

inconſiſtency; but that by ſome method or other it did come, is undeniable; for the map of Eratóſthenes is recorded by Strabo. It actually contained Thina at the extremity of the world eaſt, bounded by the ocean: it was placed in the parallel of Rhodes, in lat. 36° north; and what is moſt extraordinary of all is, that this parallel paſſes through the preſent empire of China, within the great wall. I ſhall not build more on this than it will bear, but a reference to M. Goſſellin's Map, delineated on this principle, will prove the fact; and this fact cannot be founded on imagination, or ariſe from fortuitous coincidence: there muſt have been ſome information on which it ſtands; and the wonder is, not that it ſhould be attended with many difficulties and inconſiſtencies, but that, after paſſing through ſo many hands, it ſhould retain ſo much truth.

II. SINÆ OF PTOLEMY IN SIAM, SINÆ OF OTHER AUTHORS, AND SERÊS THE SAME; PERIPLÛS, ERATOSTHENES, MELA, D'ANVILLE.

THE Thina of Eratóſthenes, however, is not to be confounded with the Thinæ or Sinæ of Ptolemy; for theſe, whether we place them, with d'Anville, in Cochin-china, or with Voſſius and Goſſellin, in Siam, are in a very different latitude and poſition. Their country does not face [10] to the eaſt, but to the weſt; and their latitude is not 36° north, but 2° 20′ ſouth [11]. But the Thina of Eratóſthenes and Strabo, is the Thina and Sinæ of the Periplûs, of which we have a certain proof; becauſe the author ſays, that ſilk

[10] D'Anville, by placing them in Cochin-china, makes them face to the eaſt; but in this he oppoſes Mercator (who had no ſyſtem to maintain), as well as Goſſellin.

[11] This is very well argued by Goſſellin. Geog. des Grecs, p. 143.

is the produce of their country. This country, therefore, is the Sêrica of Ptolemy; and in this ſenſe, the Sinæ and the Sêres are the ſame, that is, they are both Chineſe.—We muſt now advert to the groſs error of the Periplûs, which places Thina, the capital of the Sinæ, under the conſtellation [12] of the Leſſer Bear; that is, in the age we refer it to, within twelve degrees of the Pole; a climate which, ſo far from producing the ſilk-worm, muſt be uninhabitable by man. How this error aroſe, muſt be explicable only by conjecture; but it appears to originate from one of two cauſes, which are perfectly different and diſtinct: for, firſt, we find the ancient geographers very obſervant [13] of the diſappearance of the Polar Star, as we advance to the ſouth, and equally attentive to its re-appearance as we approach again to the north; it might happen, therefore, that the navigators who went to China, might have obſerved the loſs of the Polar Star in the Straits of Malacca, and the recovery of it as they approached the coaſt of China; and this obſervation, conveyed through a multiplicity of reporters, may have cauſed the confuſion between a latitude which lay under the Leſſer Bear, and a latitude where the Polar Star became viſible.

But if this cauſe ſhould be thought too ſcientific to have given riſe to ſo groſs an error, there is a ſecond, much more probable and natural; which is, that if we ſuppoſe a delineation of the habitable world, formed upon the principle of that which I obtained from

[12] Goſſellin notices the approach of this ſtar to the Pole. Ptolemy ſays, in his time it was 12 degrees from the Pole: Μικρᾶς Ἄρκτου . . . . . ἔγγιστος δὲ τῆς ἀρᾶς Ἄστὴρ ἀπέχων τὸν πόλον μοίρας ι. Ε. Lib. i. c. 7. And Goſſellin, Geog. des Grecs, tom. ii. p. 127. in the time of Solomon, makes the diſtance 17½ degrees.

[13] See Pomp. Mela, lib. iii. c. 7. In aliqua parte ejus [Indiæ] neuter ſeptentrio appareat. See alſo Marco Polo, as he comes up from Ceylon along the coaſt of Malabar. Lib. iii. c. 23. Ramuſio.

Al Edriſſi [14] in the former part of this work, or like the Borgian [15] Table in Sir Joſeph Banks's poſſeſſion, the degrees of longitude diminiſh ſo haſtily as we approach towards the north, that they do not leave room to diſplay all the regions which ſuch a geographer as our author, muſt find it requiſite to crowd into the ſpace that he has to cover. This ſeems to be a natural ſource of the error which we find in the Periplûs; and this opinion is confirmed by what he immediately ſubjoins: "Thina lies," ſays he, "at the Leſſer Bear "itſelf; and it is ſaid to join the limits of Pontus [16], which are to-"wards [17] the north, and the Caſpian Sea, with which the Palus "Mêôtis is connected, and iſſues into the ocean at the ſame "mouth." Here, beſides the error common to many of the ancients, that the Caſpian Sea was open to the Northern Ocean, we have a variety of other miſtakes; added to which, China, Tartary, the Caſpian, the Euxine, and Palus Mêôtis, are all huddled together in ſuch confuſion, that nothing but the conſtruction of a map, on the principles here ſuppoſed, could produce.

Whether theſe excuſes will avail in favour of an author, whoſe errors I wiſh not to extenuate, but explain, muſt be left to the judgment of others: beyond Ceylon, all he knew was from report; and on report only procured, firſt by the Macedonians, and afterwards by Megáſthenes, Daímachus, Dionyſius, and the merchants of Egypt, all the knowledge of the ancients muſt be founded. But whatever may be the error of poſition, there can be no miſtake about the country intended. The ſilk fabric itſelf, and the mate-

[14] The ſame circumſtance occurs in Sanuto's Map, in the Geſta Dei per Francos. A little to the N.E. of the Caſpian Sea a notice is inſerted, Incipit Regnum Cathay.

[15] In that map, Poland is almoſt as near China as it is to England.

[16] Perhaps the Euxine.

[17] Ἀπειρημένος.

rial [18] of which it is made, are both ſpecifically applied, by the name of Sêrica, to the country of the Sinæ. This identifies them with the Sêres and Thina of the Periplûs; and that the Sêres are the Chineſe, is generally allowed by the geographers of the preſent day.

D'Anville had [19] certainly no pre-diſpoſition in favour of this opinion; for in coming through Scythia towards the Sêres, he paſſes the country of the Eighurs from five to ten degrees weſt of China; and in that province he finds a tree which produces a fruit like the cocoon of the ſilk-worm. Here, perhaps, his own judgment would have induced him to pauſe; but he yields honeſtly to conviction, and proceeding eaſtward into China, he fixes upon Kan-cheou, juſt within the boundary of the Great Wall, for the Sêra metropolis of Ptolemy. But there was in reality no ground for heſitation, nor any cauſe of ſolicitude for fixing on Kan-cheou, rather than Pekin, or any other great city, which might in that age have been the capital of the North; for the acquiſition of general knowledge is all that can be expected in a queſtion ſo obſcure and remote; and the aſtoniſhing approach to accuracy which we find in Ptolemy, is one of the moſt curious geographical truths bequeathed to us by the ancients; for the latitude [20] of his Sêra metropolis is within little more than a degree of the latitude of Pekin, and nearly coincident with that of Kan-cheou. Whether, therefore, we chuſe one of theſe, or whether there was any other metropolis in that age, we are equally in the country of the Sêres, and the Sêres are Chineſe. They are the firſt of men, ſays Pliny [21], that are known on

[18] Θίνα, ἀφ' ἧς τό τε ἤριον καὶ τὸ ἐθόνιον τὸ Σηρικὸν. P. 36.

[19] Antiq. de l'Inde, Supplement, p. 233.

[20] Latitude of Sera metropolis 38 36′; of Pekin 39 45′.

[21] Lib. iii. c. 17. or 20 Hard.

commencing

commencing our inquiries from the Eaſt, and their country fronted to the eaſt. That there was nothing beyond them but the ocean, was the general opinion of the ancients; for, according to Strabo, "ſuppoſing[22] the world to be a ſphere, there is nothing but the "immenſity of the Atlantic Ocean, which *ſhould hinder* us from "ſailing from Spain to the Indies upon the ſame parallel."

III. RELATIVE SITUATION OF THE SERES, WITH RESPECT TO SCYTHIA, AND INDIA BEYOND THE GANGES.

If the Sêres, then, are the firſt nation of the known world[23] commencing from the eaſt, let us next inquire into their ſituation relative to the countries north and ſouth. On this head, Mela and Pliny both agree that their boundary on the north[24] is Tabis, and Taurus on the ſouth; that all beyond them north is Scythia, and all beyond them ſouth, is India eaſt of the Ganges. By the latter expreſſion they mean, that the whole country, from the Ganges to the Eaſtern Ocean, is called India, comprehending all the regions in the Great Peninſula[25], which commences at the Ganges, and part alſo of the ſouthern[26] provinces of China itſelf. What then are Tabis and Taurus, but two promontories advancing into the Eaſtern

[22] P. 64. In reſpect to the parallel, this would have been true between Spain and China.

[23] In ea primos hominum ab oriente accepimus, Indos, Seras, Scythas. Spectant meridiem Indi, ſeptentrionem Scythæ uſque ad Caſpium. Mela, i. 2.

Seres primi hominum qui naſcuntur. Plin. vi. 17. or 20 Hard.

[24] Inter Tabin et extremum Tauri promontorium, Sêres. P. Mela, iii. 7.

[25] By the term of the Great Peninſula, I mean all the countries included in a line drawn from the mouth of the Megna, or Brahmaputra, to China, as the northern limit, and the Straits of Sincapura as the ſouthern; comprehending Ava, Arracan, Pegu, Siam, Malaya, Camboya, Cochin-china, Lao, and Tonkin.

[26] The northern part of India, extra Gangem, terminates with Taurus. Strabo, p 68.

Ocean,

Ocean, and marking the limits of the Ancient Sêres? Scythia, according to Pliny, commences at the iſſue of the Caſpian Sea into the Northern Ocean, and extends all round the continent, fronting north and north-caſt [27], till it comes to Tabis, which divides it from the Sêres; and what is meant by Taurus may be diſcovered in Strabo, who informs us, that Eratóſthenes prolonged Taurus from the Bay of Iſſus in the Mediterranean, acroſs the whole continent of Aſia, dividing it by the ſame parallel [28] of latitude, till it terminated on the Eaſtern Ocean, that is, the Sea of China. At the termination was Thina, on the ſame parallel as Rhodes, which is 36° north; and this parallel, if we ſuppoſe it to be correct, would embrace all the northern part of China, between latitude [29] 36° and 40°; that is, if we fix the ſouthern limit at the promontory of Taurus, in 36°, and the northern at Tabis ſomewhere about 40°. A reference to M. Goſſellin's Map [30], delineated in conformity to the idea of Eratóſthenes, will explain this better than words; and whether theſe promontories be real or imaginary, this is the hypotheſis or ſyſtem of the ancients. If Tabis has a repreſentative, we might ſuppoſe it to be the termination of the Great Wall on the Yellow Sea, which divides China from Tartary; but the Wall does not end in a cape, and this muſt be left wholly to conjecture.

[27] Pliny, vi. 17. or 20 Hard. æſtivum orientem.

[28] The cauſe of this ſuppoſition is, that the merchants who croſſed this great belt of Aſia, at whatever point it might be where their courſe directed, never croſſed it back again towards the ſouth, but proceeded through Tartary to China By Ptolemy's route, they paſſed it in Hircania; by the route of the Periplûs, at Kabul; by the route of the Seſatai, or Beſadai, in Laſſa or Thibet; but Alexander, who came out of Sogdiana to the Indus, croſſed it from north to ſouth over the Paropamiſus, perhaps at the Paſs of Bamian.

[29] Seres media ferme Eoæ parte incolunt, Indi, et Scythæ ultima. Mela, i. 2.

[30] Geographie des Grecs.

IV. CAPITAL, SERA METROPOLIS.

In regard to the capital, the Sêra Metropolis of Ptolemy, though it is not indifferent where we place it, yet it may be thought hazardous to maintain that it is Pekin. Pekin, however, or the Northern Court, is one of the oldeſt cities in China: it is ſituated near the Wall, and well adapted to form a frontier town againſt an invaſion of the Tartars, the only enemy which the empire has had to fear in every age. It is remarkable alſo that Ptolemy, in one place [31], calls Sêra the capital of the Sinæ, which makes it correſpond with the Thina of the Periplûs; and this ſo eſſentially, that if the great error of the author in carrying it to the Leſſer Bear could be ſet aſide, Thina and Sêra Metropolis would be identified. On account of that error, I do not inſiſt upon this; but, upon the whole, the Sêres of Ptolemy coincide with the Sêres of Mela, Pliny, and Dionyſius; and his latitude of the capital advancing ſo nearly to the parallel of Pekin, is one of the moſt illuſtrious approximations that ancient geography affords.

Without affecting preciſion, we have now a poſition for the Sêres in the northern provinces of China; and this deduction, as it is founded on the information of the ancients, is not much controverted by the moderns. But we have another characteriſtic of the Sêres, derived from the produce of their country, which is ſilk:

[31] And not in one only. Lib. i. c. 11. Καὶ τὴν ἀπὸ τῆ λιβίνη πύργη μέχρι Σήρας τῆς τῶν ΣΙΝΩΝ μητροπόλεως. Where the Latin text runs, Uſque ad Seras quæ SERUM eſt metropolis. Whether Σινῶν, therefore, be a falſe reading, muſt be left to the critics; but ſo it ſtands in the edition of Hondius 1605, which I uſe. The Sêres and Sinæ are again mentioned in conjunction, lib. vi. c. 16.; and through the Sinæ a line may be drawn, μεχρὶ τῆς ἐκτεθειμένης πρὸς τῇ ἀγνώστω γῇ πέρατος; and theſe are manifeſtly not the ſame as his Sinæ in lat. 2° 20′ ſouth.

this

this beautiful fabric we know, from the Chineſe themſelves, was the original manufacture of their country—ſpecifically their own, by the prerogative of invention; and though communicated to other countries in their neighbourhood, and from the firſt mention of it, procurable in the ports of the Golden Cherſoneſe, at the Ganges, and on the coaſts of Coromandel and Malabar, ſtill was it ſo excluſively and pre-eminently the attribute of China, that the Sinæ were, from this very circumſtance, denominated Sêres, or Silk-worms, by the Greeks. D'Anville was fully aware of all the authorities [32] that ſupport this fact, and yet he objects, that they were ſtyled Sêres before it was known that the material itſelf was the production of an inſect.

V. SERES DISTINGUISHED AS MANUFACTURERS OF SILK.

THE miſtakes [33] of the ancients on this ſubject; the fluctuation of the firſt reporters, who ſometimes confounded it with cotton, and the opinion which long prevailed, that it was obtained from the bark or leaves of particular trees, have been ſufficiently diſcuſſed by

[32] Σῆρες, ζῶα νήσσοντα μέταξαν, ἢ ὄνομα ἔθνους ὅθεν ἔρχεται καὶ τὸ ὁλοσήρικον. Heſychius in voce.

Seres, animals that ſpin the ſilk thread, or the name of the nation from whence the genuine ſilk comes. Ὁλοσήρικον expreſſes a web wholly of ſilk, in contraſt to the mixture of ſilk with other materials in the manufactories of Tyre, Berytus, &c.

Σηρῶν, σκωλήκων τῶν γεννάντων τὰ Σηρικά. Σῆρες γὰρ οἱ σκωλήκες. Heſych.

Sêrôn, the worms that produce the ſilk; for Sêres is equivalent to worms.

See alſo Pauſanias, Eliac. ii. ſub fine.

D'Anville has all theſe authorities. Antiq. de l'Inde, p. 233. And Voſſius cites Pollux, Servius, and Simplicius, as all informed of the worm; but certainly the whole proceſs was not known till Juſtinian's time.

[33] Ubicumque apud veteres aut lini aut lanæ aut byſſi Indici mentio ſit, intelligendum id eſſe de Serico. Voſſius ad Melam, lib. iii. c. 7.

The carding it from the leaves of a particular tree, and uſing water to facilitate the operation, occur in a variety of authors; that is, the cocoon was taken from the mulberry-tree, and wound off in water.

numerous

numerous writers on the ſubject; but that the Arabs had met with it in India before there were any Greek fleets in the Eaſtern Ocean, can hardly be doubted, by thoſe who read that the Macedonians obtained their firſt knowledge of it in the countries bordering on the Indus. Hither it muſt have been brought in that age, either by the trade which paſſed between Patala and Malabar, or by the caravans through Scythia, on the north; for that in ſo early an age it was manufactured in India can hardly be admitted, when we obſerve that the author of the Periplûs, four hundred years later, mentions it in Malabar, not as a native production or manufacture, but as an article brought thither from countries farther[34] to the eaſt. But in regard to China, his account is very different; for there, he ſays, both the raw material[35] and the manufacture were obtained. The pre-eminence in this reſpect is ſtill due to the ſame country; for notwithſtanding that almoſt all the nations of the Eaſt, and many in Europe, now breed the inſect and weave the fabric, China is ſtill *the Country of Silk*; the greateſt quantity is ſtill produced there, and of the beſt quality: it is the general clothing of the nation, and its ſuperabundance ſtill allows of a vaſt exportation to all the countries of the Eaſt, and to Europe itſelf.

In the courſe of this inveſtigation, then, we have learnt from ancient authorities, that the Sêres are the Thinæ of Eratóſthenes—the Sinæ of the Periplûs; that their country lies between Tartary, on the north, and India extra Gangem, on the ſouth; that it is the remoteſt region[36] towards the eaſt; that it is bounded on its

[34] Φέρεται ἐκ τῶν ἔσω τόπων. P. 32.

[35] P. 36.

[36] Διὰ μέταξαν εἰς τὰ ΕΣΧΑΤΑ τῆς γῆς τὰς ἐμπορίας ἐικτρᾶς χάριν, οὐκ ὀκνεσι διελθεῖν. Coſmas, p. 137.

Men do not heſitate to go to the *extremity* of the world for the purchaſe of the ſilk thread.

eaſtern front by the ocean; that the ocean extends (in their opinion), without interruption, on the ſame parallel to the coaſt of Spain; and that ſilk was brought from this country, where it was originally found, to India, and out of India, by the Red Sea, into Egypt, and from thence to Europe.

VI. INTERCOURSE BETWEEN CHINA, INDIA, AND EUROPE; ROUTE FROM PTOLEMY MAES, THE MACEDONIAN.

But if ſilk was brought from the Sêres to India, there were but two means of conveyance—by land, or by ſea. Both are ſpecified in the Periplûs; for the author informs us, firſt, that the raw material and the fabric itſelf were conveyed by land, through Bactria, to Barugáza or Guzerat, and by the Ganges to Limúrikè.—But, omitting this for the preſent, let us examine what is intended by the route that is deſcribed through Bactria to Guzerat. A reference to the map will immediately ſhew us, that Balk, or Bactria, lies almoſt directly north of the weſtern ſources of the Indus; and as we know that the caravans at this day paſs out of India into Tartary at Cabul [u], ſo is it plain that this was the uſual courſe of communication, from the earlieſt times; and that the ſilks of China then came the whole length of Tartary, from the Great Wall into Bactria [v]; that from

[u] The whole paſſage, as it ſtands in Purchas, is curious:— Beyond Cabul is Taul Caun, a city of Buddoeſha (Badakſhan). From Cabul to Caſhcar, with the caravan, is ſome two or three months journey.... a chief city of trade in this territory is Yar-caun, whence comes much *ſilk*, muſk, and rhubarb; all which come from China, the gate or entrance whereof is ſome two or three months journey from hence. When they come to this entrance.... by licenſe they ſend ſome ten or fifteen merchants to do buſineſs, who being returned, they may ſend as many more; but by no means can the whole caravan enter at once. William Finch in Purchas, vol. ii. p. 434.

[v] And by another caravan, to Palibothra on the Ganges. Καὶ ὅτι οὐ μόνον ἐπὶ τὴν Βακτριανὴν ἐντεῦθέν ἐστιν ὁδὸς, διὰ τῆς λιθίνου πύργου, ἀλλὰ καὶ ἐπὶ τὴν Ἰνδικὴν διὰ Παλλιμβόθρων. Ptolem. lib. i. cap. 17.

Bactria

Bactria they paſſed the mountains to the ſources of the Indus, and then came down that river to Patala or Barbárikè, and from hence to Guzerat.

Ptolemy [39] has given us the detail of this immenſe inland communication; for, beginning from the Bay of Iſſus in Cilicia, he informs us, from the account of Marínus, that the route croſſed Meſopotamia, from the Euphrates to the Tigris, at the height of Hierapolis; then through the Garamæi [40] of Aſſyria, and Media, to Ecbatana and the Caſpian Paſs; after this, through Parthia to Hecatompylos; from Hecatompylos to Hyrcania; then to Antioch in Margiana; and hence, through Aria, into Bactria. In this province, the line of Marínus falls in with that of the Periplûs; and from this it paſſes through the mountainous country of the Kômêdi [41]; then through the territory of the Sacæ [42] to the Stone Tower [43], and to the ſtation of thoſe merchants who trade with the Sêres; from this ſtation the route proceeds to the Caſii or Caſhgar, and through the country of the Itagûri, or Eyghurs of d'Anville, till it reaches Sêra Metropolis, the capital of China itſelf. The extent of this communication, which is in a right line upwards of four thouſand miles, would have been protracted by the eſtimate of Marinus [44] to double the ſpace [45] to which it is reduced by Ptolemy, and yet Ptolemy makes it ninety degrees, or upwards of ſix thouſand miles. But contracted as it is

[39] Lib. i. c. 12.

[40] Aramæi?

[41] I have little heſitation in ſuppoſing that the Cômêdi are to be placed in Badakſhan, as mountains are the attribute of the country.

[42] The Sacæ, without aſſigning them preciſe limits, anſwer more nearly to the Uſbecks than any other tribe. The Stone Tower would be in the eaſtern part of their country, towards Kaſhgar.

[43] See Ptol. tab. vii. Aſia. Iſagûri.

[44] Ptol. lib. i. c. 11.

[45] According to Marínus, it was 24,000 ſtadia from the Stone Tower to Sera; that is, either 2400 or 3000 miles: the real diſtance is ſhort of 1400. Ptol. lib. i. c. 12.

by modern geography, it is aſtoniſhing that any commodity, however precious, could bear the expence of ſuch a land-carriage; or that there ſhould have been found merchants in the Roman empire, who engaged in this commerce throughout its whole extent—who actually conveyed the produce of China by land to the Mediterranean, without the intervening agency of the nations which poſſeſſed the countries through which it paſſed. But this is a fact actually preſerved by Ptolemy; for he informs us from Marínus, that Maes, a Macedonian [46], whoſe Roman name was Titianus, did not indeed perform the journey himſelf, but that he ſent his agents through the whole extent of this extraordinary peregrination.

In what ſtate the Tartar nations then were, which could admit of ſuch a traffic through all theſe different regions, it is now extremely difficult to determine; for though caravans have paſſed within theſe few years between China and Ruſſia, and though there was a communication [47], and perhaps ſtill is, between that empire and Samarkand, as alſo with the Uſbecks, this was carried on by the natives of the reſpective countries, and afforded no paſſage for merchants to paſs throughout, from one extremity of Aſia to the other.

VII. MODERN ROUTE—MARCO POLO, RUBRUQUIS, CARPIN, GOEZ.

THERE was a period indeed, during the time of Zingis and his immediate ſucceſſors, when the power of the Mongoux extended from the Sea of Amour to Poland and the Euxine; and when there was a regular intercourſe, by eſtabliſhed poſts, throughout this vaſt

[46] Lib. i. c. 11.

[47] The centre of this traffic ſhould be Caſhgar; and ſo it appears in the journal of Benedict Goez.

extent;

extent; by means of this, Marco Polo, his uncle, and his father, Rubruquis, Carpin, and others, actually reached the court of Cambalu, and returned again by paſſports from the emperor. It was Marco Polo, the firſt of modern travellers who brought to Europe any conſiſtent account of this vaſt empire—who entered China by the north, and returned by ſea to Bengal. His route outwards is not eaſy to trace, becauſe his deſcriptions diverge both to the right and to the left; but it is highly probable that he entered China nearly by the ſame route as Goez did, from Kaſhgar: this would have brought him to Sochieu, or ſome other town in the neighbourhood, to reach which he might not have paſſed the Great Wall. But if this would account for his not mentioning it in the firſt inſtance, it does not ſolve the difficulty; for the court of Coblai, like that of Kien-long the late emperor, was a Tartar court, frequently kept in Tartary as well as China; and during the many years which he attended Coblai, he muſt have been in both. He did not bring the name of China to Europe, but Cathai and Mangi only, becauſe he obtained thoſe appellations alone which were in uſe among the Tartars; and it was ſeveral centuries later, before it was known that Cathai and China were the ſame. We are contending here only for the exiſtence of the communication, and endeavouring to ſhew, that in the middle ages it was the ſame, or ſimilar to that of the ancients. But from the time when the empire of the Tartars broke into ſeparate governments, no travellers or merchants from Europe dared to attempt the dangers and exactions which muſt have attended them at every ſtep, and when the progreſs of Mahomediſm, in theſe northern courts, brought on an additional ſuſpicion and hoſtility againſt every Chriſtian who ſhould have entered their country.

The

The only attempt in later times, that I am acquainted with, is that of Benedict Goez [48], a Portugueze Jesuit, who left Agra in the beginning of 1603, and proceeded by Lahore to Cabul; and from Cabul, by way of Balk and Badakshan, to Cashgar. At Cashgar, the caravans from India met those which came from China; but so difficult was it to proceed, that though Goez obtained the protection of the king of Cashgar, he did not reach Sochieu, the first city within the wall of China, till the end of the year 1605; and at Sochieu [49] he closed his life and his travels, in March 1607, without having obtained permission to go up to Pekin, or join his brethren who were established in that capital.

The undertaking of Goez is one of the most meritorious, and his account one of the most interesting, that is extant; for it is a regular journal kept of his progress, specifying every country, and every place, through which he passed [50]. The enumeration of the days he travelled is three [51] hundred and ninety, besides some that we cannot ascertain, and exclusive of the delays he met with at various stations. But from him we learn, that Sochieu was the same sort of mart for the caravans of Cashgar, as Kiachta is for the Russians; that it was inhabited half by Chinese and half by Mahomedans; that the merchants of Cashgar were admitted into China, and suffered to go up to Pekin only under the colour of an embassy [52]; that they brought presents,

[48] The account of Goez is in Trigault and Kircher, but it is here from Purchas, vol. iv. p. 310.

[49] The city marked on Marco Polo's Map, where he entered China, is Succiur, which, with the Italian pronunciation, approaches very near to Socieu.

[50] In all which I believe it is unique.

[51] As estimated by Bergeron, tom. i. Traité des Tartares, p. 75. I cannot make them so many.

[52] The same sort of trade he mentions likewise from Cochin-china, Siam, Leuchieu, Corea, and eight tribes of the Tartars: they all come under pretence of an embassy, and all the presents they bring are styled Tribute: the emperor

preſents, which the Chineſe called Tribute, every ſixth year; that from the time they paſt the frontier, the emperor bore the charge of the embaſſy; and that the articles of commerce brought from Caſhgar, were beautiful ſlabs of jaſper, or variegated marble, and ſomething that appears to be the agate, which we know, from Lord Macartney's account, the Chineſe value ſo highly at the preſent day. Throughout the whole, the courage, perſeverance, addreſs, and patience of Goez, place him in the higheſt rank of travellers: he was deſerted by all his companions but an Armenian boy, of the name of Iſaac; and Iſaac was ſo fortunate as to reach Pekin, from whence he was ſent to Macao, where he obtained a paſſage to the Portugueſe ſettlements in Malabar. Here he gave the account of his maſter's expedition and deceaſe; and more particularly mentioned the ſurprize of Goez, in finding that Cathai was China, and Cambalu, Pekin.

Excluſive of the communication between Ruſſia and China, which has been ſeveral [11] times interrupted and renewed. This journal of Goez is the only authentic information to be depended on; and it is of the greater importance, as it is a line much farther to the ſouth than the route of the Ruſſian caravans, and actually coincides with the detail given by Ptolemy, and implied by other ancient geo-

emperor bears all their expences as ſoon as they enter China. In this, then, conſiſts the policy—that if he bears the expence, he has a right to limit the time; and he affects to know of no embaſſies but from his tributaries. Apply this to Lord Macartney's embaſſy, and it proves why the embaſſador was compelled to depart at a given day, and why his preſents were inſcribed with the name of Tribute.

The ſame circumſtances are repeated by Joſafa Barbaro (in Ramuſio, tom. ii. f. 106.), which he received from a Tartar on the Don, who had paſſed from Samarkand to China, which was the courſe of the northern caravans in that age, 1450; and ſilks, though then made in Perſia, formed the principal article of the trade. This Tartar had been at Cambalu; had been introduced to the emperor, and referred to the miniſters, &c. &c.

[11] See Iſbrundt Ides. Bell. Cox's Ruſſia.

graphers; for Badaſcian, the Badakſhan of Cherif Eddin, is the natural repreſentative of Ptolemy's Cômêdi [54], and Kaſhgar, the country of his Caſii. Kaſhgar is likewiſe a kingdom of much importance, and a country of great extent; for Goez was employed from ſixty to ſixty-five days in paſſing it, and he had ſtill from forty to fifty before he reached Sochieu.

VIII. ROUTE OF THE SÊSATÆ FROM ARRACAN TO CHINA.

Let us next examine the ancient accounts, in regard to this and other routes of the ſame ſort. The firſt author that ſpecifies this intercourſe by land is Mela [55]: he ſays, the Sêres are a nation celebrated for their juſtice, and have become known to us by their commerce; for they leave their merchandize in the deſert [56], and then retire, till the merchants they deal with have left a price or barter for the amount, which, upon their departure, the Sêres return and take. This aſſertion is repeated again by Pliny, and confirmed by the Periplûs [57]; for that the Sêſatæ of that journal are the Tartar tribes which trade with China, cannot be doubted: the extravagances recorded of them, the

[54] If we may judge by the mountains attributed to both. Timur had always a body of Badacſhans in his army, for the purpoſe of paſſing ſtraits, climbing mountains, &c. according to Cherif Eddin.

[55] Lib. iii. c. 7.

[56] Commercium . . . rebus in ſolitudine relictis abſens peragit. Mela, lib. iii. c. 7.

[57] Ammianus Marcellinus (lib. xxxiii. p. 381. Paris, 1681) has recorded the ſame character of the Sêres, and the ſame mode of conducting their commerce with foreigners; but with the addition of a curious particular: that ſilk had formerly been confined to the great and rich, but in his time was within the purchaſe of the common people (nunc etiam ad uſum infimorum ſine ulla diſcretione proficiens). This circumſtance proves, not only the great extenſion of commerce at Conſtantinople within thirty years after its foundation, by which the material was obtained, but likewiſe the proficiency of the manufacturers [perhaps at Tyre and Berytus] in preparing it for the market. The whole paſſage is worth conſulting.

articles

articles [58] mentioned, throw a ſhade of obſcurity over this tranſaction; but that a fair [59] or mart is held for ſeveral days, and that the goods are left to the faith of thoſe they deal with, is evident; and that this is a characteriſtic [60] of the Chineſe trade, from the age of Mela to the eſtabliſhment of Kiachta, is the uniform teſtimony of all that mention the commerce. Now that the Sêſatæ are a Tartar tribe cannot be queſtioned, when we find them deſcribed in the Periplûs; for they are a race of men ſquat and thick ſet, flat noſed, and broad faced. They travel with their wives and families, and convey their merchandize enveloped in ſacks or mats [61]. Theſe are manifeſtly the Bêſadai, or Bêſatai, of Ptolemy, deſcribed under the ſame attri-

[58] The malábathrum is attributed to the Sêſatai by the Periplûs; and though it is much more natural that the Tartars ſhould obtain betel from the Chineſe, than the contrary (and ſo Voſſius renders it), yet that the Sêſatai and Bêſadai are the ſame, cannot be doubted. The words of the Periplûs are, Σώματι κολοβοὶ, καὶ σφόδρα πλατυπρόσωποι, σιμοὶ ἰὶς τέλος. Of Ptolemy, Κολοβοὶ, πλατεῖς, καὶ ἀχσιῖς, καὶ πλατυπρόσωποι. Λευκοὶ μεν τὰς χρόας· ὑπὲρ δὲ τὴν Κιῤῥαδίαν ἐν ᾗ φασι γίνεσθαι τὸ κάλλιστον Μαλάβαθρον. Now the Kirrhadii of Ptolemy are at the eaſtern mouth of the Ganges, and there the betel might grow, or be procurable; and if the Bêſadai were ſeated on the north of that country, they would be in Laſſa or Thibet, both of which are Tartar countries, and might well be engaged in conducting this traffic between China and Bengal, or perhaps Arracan. But whatever obſcurity there may be in this, it appears evident that Ptolemy and the Periplûs mean the ſame people; and, by the ſimilarity of expreſſion, copied from the ſame authority. It ought likewiſe to be obſerved, that Σιμὰ ἰὶς τίλος, as it now ſtands in the Periplûs, is a reading of Voſſius for ἰνιὰ, or ἐνμὰ, or ſomething unintelligible in the firſt copy of the Periplûs. Upon the whole, therefore, if we interpret the Periplûs by Ptolemy, and conclude that the Sêſatai brought the betel from Bengal or Arracan, making them the ſame people as the Bêſadai, we have a conſiſtent account of this article reaching the northern provinces of China, as it reached the ſouthern by ſea. That the betel ſhould be procurable in Arracan, is reaſonable; for it grows abundantly in Ava. Symes's Embaſſy, p. 255. See alſo Dr. Buchanan's Account of the Burmas, As. Reſearches, vol. v. p. 219.

[59] Voſſius reads ὀρτάζωσιν for ἁρπάζωσιν.

[60] Cœtum reliquorum mortalium fugiunt, commercia expectant. Plin. vi. 20. Expetunt?

[61] Ἐν ταρπόναις, in ſirpeis; mats made of ruſhes, bags, or ſacks. So the Scholiaſt on Dionyſius, 757. Οἱ δὲ Σῆρες πολῖται ἵππων ὑποκρίνονται, τὸ τίμημα ἐπιγράφοντες τοῖς ΣΑΚΚΟΙΣ καὶ ὁ ἔμπορος ἐξ ἐπιγραφῶν ποιεῖται τὰς ἀποκρίσεις.

The Sêres, who are the ſellers, make the firſt propoſal, by marking the price on their *ſacks*; and the buyer, according to the mark, fixes his price in return.

 butes,

butes, and almoſt in the ſame words, with the addition, that they are of a white complexion[62]; and that the malábathron, or betel, is brought by them from the country of the Kirrhádæ, at the eaſtern mouth of the Ganges.

Here, therefore, we may diſcover another line of intercourſe between India and China, which paſſed the mountains of Thibet[63], and joined the route which came from Cabul and Balk, or reached the ſouthern provinces of that great empire by a ſhorter courſe; and this, perhaps, may explain a dubious[64] paſſage of the Periplûs already noticed, and may inſtruct us how the ſilk of China came down the Ganges, or the Brama putra into Bengal, and from thence paſſed by ſea to the coaſts of Coromandel and Malabar.

The northern communication with China is intimated likewiſe by Dionyſius, who, after leaving the Oxus, the Iaxartes, and the Caſpian Sea, on his progreſs eaſtward, mentions in order, the Sacæ, Tocharoi, the Phrooroi, and then the Sêres. If he had taken theſe regularly, the Tocharoi would have been the Tartars of what is ſtill called Tochariſtan[65], the Sacæ would be the Uſbecks, and Phrooroi (poſſibly the Greek word φρῦροι[66], as an appellative, and not a proper name) expreſſes the guard or garriſon at the Stone Tower in the country of the Sacæ, or the ſtation in the territory of the Caſii, from whence the caravan proceeded to the Sêres. I mention theſe circumſtances not ſo much on account of the geography, for

[62] Ptolemy, p. 177.

[63] The ſame intercourſe between Thibet and China is mentioned at a mart called Silling or Sinning, by Turner, p. 372. Embaſſy.—Rhubarb is noticed, p. 294.; and the white quartz grit-ſtone, for Porcelane, p. 390. The trade between China and Ava is carried on at Jee. Symes's Embaſſy, p. 325.

[64] See ſupra, p. 478.

[65] The Turkiſtan of the Arabs.

[66] But Pliny writes Thuri, Θῦροι. Salm. 989.

we are dealing with a poet, as for the purpoſe of introducing his beautiful deſcription of the ſilks woven by the Sêres:

. . . . . Σηρῶν,
Ὅιτε βόας μὲν ἀναίνονται, καὶ ἴφια μῆλα,
Ἀιόλα δὶ ξαίνοντες ἐρήμης ἄνθεα γαίης,
Εἵματα τεύχουσιν πολυδαίδαλα, τιμήεντα,
Ἐιδόμενα χροιῇ λειμωνίδος ἄνθεσι πόιης·
Κείνοις ὅτι κεν ἔργον ἀραχναίων ἐρίσειεν.

Nor flocks, nor herds, the diſtant Sêres tend;
But from the flow'rs that in the deſert bloom,
Tinctur'd with every varying hue, they cull
The gloſſy down, and card[67] it for the loom.
Hence is their many-coloured texture wrought
Precious, and bright in radiance, that tranſcends
The mingled beauties of th' enamel'd mead.
A web ſo perfect, delicate, and fine,
Arachne and Arachne's progeny
Might emulate in vain[68].

[67] Virgil ſuppoſed the Sêres to card their ſilk from leaves:

Velleraque ut foliis depectunt tenuia Seres.

Strabo, who does not mention the Seres, ſtill notices Serica, or ſilk: Ἐκ τινων φλοιῶν ξαινομένης Βύσσου. P. 693. Byſſus, or a fine material carded from the bark of a particular tree.

Pauſanias meant to correct them both, when he wrote ὐ μίτοι δὶ ἀφ' ὧν τὰς ἐσθῆτας ποιοῦσιν ὐ Σῆρες ἀπὸ ὐδενὸς φλοιοῦ, τρόπον δὶ ἕτερον γίνονται τοιόνδε, Ἔστιν ἐν τῇ γῇ ζωύφιον σφίσιν ὃν Σήρα καλοῦσιν ὐ Ἕλληνες.

The thread from which the Sêres form their web, is not from any kind of bark, but is obtained in a different way: they have in their country a ſpinning inſect, which the Greeks call Seer. 11 Eliac. in fine.

But Pauſanias, though he had learnt that it was a worm, had not learnt more: he ſuppoſed it to live five years, and that it fed on green haulm. The workmen of Tyre and Berytus wrought the metaxa, or organzine, imported long before the perfect nature of the animal or the material was known. The true hiſtory and management of it were not complete, till the monks obtained it for Juſtinian.

[68] In honorem Deorum (coronas) *veſticolores* velle Sericâ, unguentis madidas. Hunc habet noviſſime exitum luxuria fœminarum. Plin. lib. xxi. c. 8. Hard.

We obſerve here, not only the light-flowered ſilks, but the introduction of them into religious ceremonies, as early as the time of Pliny.

IX. INTERCOURSE BY SEA—MELA, RAJAH OF PLINY, COSMAS INDICOPLEUSTES.

I HAVE dwelt more particularly on the ſilk of China, becauſe it is as eſſentially the diſtinguiſhed produce of that country, as the pepper of Malabar, the muſlins of Guzerat, the myrrh and frankincenſe of Arabia, are characteriſtics of theſe ſeveral countries; and I am very anxious to prove the communication with China by land, becauſe it will preſently appear that there was another line of intercourſe by ſea. If, therefore, the acceſs both ways can be eſtabliſhed, China alone, whether denominated Thina, Sinæ, or Sêres, muſt be the country intended; for no other can be approached by theſe two different ways; and theſe two, opened from the earlieſt accounts we have in hiſtory down to the preſent day, denote excluſively the appropriate character of that vaſt empire, as theſe circumſtances can be applicable to no other. The eſtabliſhment of this truth will afford a ready ſolution of the difficulty which ariſes from the poſition of the Sinæ in Ptolemy: they cannot be in China; and if we accede to the opinion of M. Goſſellin, that they are in Siam, we muſt conclude that Ptolemy, who gives ſo imperfect an account of the voyage to Cattígara, knew nothing of a farther intercourſe by ſea with the Sêres, and that it was unknown in his age.

Mela, however, is ſaid to aſſert it, if we may believe the interpretation of Voſſius; but in Mela nothing more appears, than that from Colis to Cudum the coaſt is ſtraight. His Colis is the ſouthern point of India; and Cudum, according to Voſſius[69], implies the Cudutæ of Ptolemy, who are the nation neareſt to the Sêres. The

[69] In Melam, Lib. iii. c. 7.

accuracy of geography we are not concerned with here, but the aſſertion; and what is meant may be ſeen by conſulting M. Goſſellin's [70] Map of Eratóſthenes. But this evidence is dubious and obſcure, and conduces nothing to the proof of any voyage performed. Little more ſatisfaction ſhall we receive from Pliny or the Periplûs; for the father of the Rajah, who came upon the embaſſy from Ceylon to Rome in the reign of Claudius, did not reach the Sêres by ſea, but paſſed from India over the mountain Emôdus, the Himmalu of the Hindoos, and thence by an eaſtern route arrived at the country of Sêres, with whom he traded under the ſame reſtrictions as the merchants from Perſia and Europe, or the Sêſatæ mentioned by the Periplûs.

Coſmas, as far as I can diſcover, is the firſt author that fully aſſerts the intercourſe by ſea between India and China; for he mentions that the Tziniſtæ brought to Ceylon ſilk, aloes, cloves, and ſandal-wood. The articles themſelves are the ſpecific exports of China ſtill; and that the Tziniſtæ [71] are Chineſe, can not be queſtioned; for he expreſsly mentions their country, not merely as exporting, but producing ſilk; and ſpecifies the diſtance from it by land as much ſhorter, compared with the voyage by ſea. This circumſtance can accord with no other country, at the extremity of the eaſt, but China; for no other country is ſo ſituated as to have this double communication, conſequently his Tziniſtæ are Chineſe: they have the ſame attributes as the Sêres—they are the ſame people; firſt, by the means of approach; and, ſecondly, becauſe

[70] Geographie des Grecs.

[71] Voſſius ſuppoſes the Siameſe to have ſettled in Ceylon; and a temple found in Ceylon by Capt. Colin M'Kenzie, reſembles the temples in Ava, Pegu, and Siam. Still the orthography of Tziniſtæ is ſo eſſentially *Chineſe*, that it precludes all doubt. See As. Reſearches, vol. vi. p. 438.

they

they are ſurrounded by the ocean on the eaſt, and becauſe that beyond them there is no navigation [72] or habitation. This is the one point, above all others, which I have laboured to eſtabliſh by this diſquiſition; and though I obtain not my proof till the ſixth century [73], the evidence is conſiſtent in all its parts, and complete. The inference is juſtifiable, that the ſame intercourſe exiſted by ſea, as well as by land, in ages much earlier, though the account had not reached Europe, and though the proof is defective. It is in vain that I have ſearched for any intelligence of this ſort previous to Ptolemy, though I was very deſirous to find it, and prepoſſeſſed in favour of its exiſtence.

Two paſſages in the Periplûs had almoſt induced me to preſs the author into the ſervice, and compel him to bear teſtimony to the fact. The firſt is, where he mentions the difficulty of going to, or coming from China; the ſecond, where he notices that the malábathrum is brought from Thina by thoſe who prepare it. But, upon a ſcrupulous review of theſe paſſages, I am perſuaded that he conſiders only the communication by means of the Indus or the Ganges; and that though he allows an exterior ſea on the eaſt of China, the laſt place that a voyage by ſea extended to, in his idea, was the Golden Cherſoneſe. Had I formed a ſyſtem, the want of ſuch an evidence would have been a vexatious diſappointment; and the more ſo, as my firſt contemplation of his language had perſuaded me that I could apply it to this proof.

[72] Περαιτέρω δὲ τῆς Τζινίτζας οὐδὲ πλέεται οὐδὲ οἰκεῖται. Coſmas, p. 138. Montfaucon, Nov. Col. Patrum, tom. ii.

[73] The date of Coſmas's work is 547, according to Montfaucon, Prefat. cap. i.

X. GOLDEN CHERSONESE, VOYAGE FROM CEYLON THITHER, COAST OF COROMANDEL, MASULIPATAM, GANGES, ARRACAN, AVA, SIAM, CATTÍGARA.

THE next point to be conſidered is, how it ſhould happen that Ptolemy ſhould be unacquainted with the intercourſe between the Golden Cherſoneſe and China; that his information ſhould terminate with the Sinæ and Cattígara, which, to all appearance, are on the weſtern coaſt of Siam. But he acquaints us candidly himſelf, that though Marinus [74] had heard of the journey performed by the agents of Maes through Scythia to the Sêres, he had no account of any one who had made the voyage by ſea from the Golden Cherſoneſe to Cattígara: all that he knew therefore, even of Cattígara, was from report; and much leſs could he know of all that was beyond it, that is, of all that was to the eaſt of the Straits of Malacca.

The firſt view of his map would naturally ſuggeſt the idea which M. d'Anville has embraced: it looks like the termination of the peninſula of Malacca, and riſes up again northward to his Sinus Magnus, as if we were entering the bay of Siam [75], the ſea of Cochin-china, and China. But when we obſerve his Sinæ placed on the ſame parallel with Malacca, and his Cattígara carried down eight degrees [76] to the ſouth, we ſee at once that both muſt be placed on a coaſt that has no exiſtence, except in that vaſt imaginary

[74] Τῶ δὲ ἀπὸ τῆς Χρυσῆς Χερρονήσου ἐπὶ τὰ Καττίγαρα διάπλων τὸν ϛαδιασμὸν ὁ Μαρῖνος ἐκ ἐκτίθεται. Lib. i. c. 14.

[75] Siam extends, or did formerly extend, acroſs the peninſula; and the great bay, after paſſing the Straits of Sincapura, is therefore called the Bay of Siam.

[76] This is one of the circumſtances that does not accord with the poſitions of M. Goſſellin, aſſigned to China and Cattígara; but the deficiency of information requires great allowance. Perhaps it was not neceſſary to fix Cattígara at Merghi.

continent which he has brought round the whole Southern Ocean, from Africa, in longitude 80°, to Cattígara, in 180°.

It is this circumſtance which compels us, notwithſtanding the appearance of his map, to coincide with the opinion of Voſſius and M. Goſſellin, that in reality he does not paſs the Straits of Malacca and Sincapura; but that the account, which he had from report, carried him no farther than the weſtern coaſt of Siam. On this head it has been already noticed, that Mercator, who had no ſyſtem to maintain, makes the coaſt of the Sinæ front to the weſt, and this the latitudes and account of Ptolemy require; but if we place the Sinæ, with d'Anville, in Cochin-china, the face of the coaſt is reverſed—it fronts to the eaſt, or ſouth-eaſt, and makes Ptolemy in contradiction with himſelf.

Let us then ſuppoſe, either that the perſonal knowledge of the Greeks ended with Ceylon, and that all beyond was obtained by inquiry of the natives, and the merchants who came from the Eaſt; or elſe, let us aſſume that ſome few Greeks had penetrated farther. In either caſe, we may diſcover that the information was defective, both from the language of the geographers, and the conſtruction of their maps; ſtill we can follow their authority with a ſufficient degree of conſiſtency, till we arrive at the Golden Cherſoneſe; beyond that, though the reports continued of the Sêres and other diſtant regions, the fabulous prevailed over the reality. It is not ſaying too much, if we conclude all the ancients under deception in this reſpect, without exception—it is not attributing too much to Marco Polo, when we ſay, that he was the firſt European who paſſed by ſea from China to India, and thence to Europe; or at leaſt, the firſt whoſe writings teſtify that his account of this voyage,

and

and this empire, is not founded on report, but perſonal knowledge and experience.

Is it meant then to aſſert, that the voyage was never performed previous to his time? Certainly not. He lived in the thirteenth century; and almoſt four centuries before that period, we know that the Arabs traded regularly from Siraf, in the gulph of Perſia to China; and that the Chineſe came to Malabar, perhaps to Perſia and Arabia. But this Arabian account, though we have it now, reached not Europe previous to Marco Polo; and if this was true four hundred years before his time, though we were ſtill ignorant of it in Europe, it is juſt, by anology, to conclude, that the ſame voyage was performed as many ages antecedent to the Arabian account, as that is previous to Marco Polo. Coſmas[77] aſſerts it in the ſixth century; and the whole contributes to eſtabliſh the general admiſſion of the fact by inference, though the proof is defective.

The firſt error in this reſpect commences at Ceylon, the magnitude of which is irreconcileable with its actual extent; but as Mela aſſerts, that no one had ever circumnavigated[78] it, it is natural to

[77] Ἡ Τζινίστα τὴν μέταξαν βάλλουσα, ἧς ἐνδοτέρω οὐκ ἔστιν ἑτέρα χώρα· ὁ Ωκεανὸς γὰρ αὐτὴν κυκλοῖ κατὰ ἀνατολάς.

Tziniſta, which produces ſilk, beyond which there is no country, for the ocean encircles it on the eaſt. This aſſertion proves, firſt, the ſilk organzine of China; ſecondly, that China is the ſame as the Sêres of Mela and Pliny [primi hominum qui noſcuntur]; and thirdly, that Tziniſta is not the Thina of Ptolemy; for his Thina is encircled by the ocean on the weſt. And again,

Ταπροβάνη .... ἀπὸ τῶν ἐνδοτέρων, λέγω δὲ τῆς Τζινίστας, δέχεται μέταξαν, ἀλοὴν καρυοφυλλον, Τζανδάνην καὶ ὅσα κατὰ χώραν ἴσασι.

" Taprobana, or Seliediba, receives from " the countries farther eaſt, particularly from " the Chineſe, ſilk, thread, aloes, cloves, ſan- " dal-wood, and whatſoever elſe is the pro- " duce of the country." We learn by this, that the cloves of the Moluccas reached Ceylon through the medium of China; from whence it follows, that the Chineſe traded with the Moluccas in that age on the one hand, and with Ceylon on the other. Coſmas, Montfaucon, p. 337.

This account is in harmony with the account of the modern trade of the Chineſe, by Martini. P. 120. & ſeq.

[78] Nec quiſquam circummeaſſe traditur. Mela, lib. iii. c. 7.

amplify all that is unknown; and the magnificent terms in which this iſland is always ſpoken of in India, might naturally contribute to the deception. Its diſtance alſo from the continent[79] is another error, which Voſſius attempts to reconcile by ſuppoſing that the meaſure is taken from Coulam, or Covalam, to Point du Galle, becauſe Pliny ſays, the harbour is on the ſouthern ſide. Pliny likewiſe, as well as Mela, ſuppoſes the circumnavigation unattempted; and deſcribes the paſſage through the ſtraits of Manar with incorrectneſs indeed, but not with leſs difficulty than Barthema paſſed them, almoſt fifteen hundred years later, when they ſtill continued the uſual[80] paſſage for travellers and merchants.

But from Ceylon, notwithſtanding the miſtake relative to the poſition of the coaſt, we can proceed with Ptolemy (who had obtained the native appellations of the country as wonderfully here as every where elſe), without heſitation to the Ganges; for we find

Paralia Sore-tanum = the Coaſt of Coro-mandel.
Nigama[81] - - = Negapatam? D'Anville.
Chaberis River - = the Cavery in Tanjour.
Arcati Regia - = Arcot.
Maliarpha - - = Meliapoor, St. Thomè, near Madras.
Meſolia[82] - - = Maſulipatam.

In the diſtrict diſtinguiſhed by this name we are to fix the point or cape, where thoſe who left the coaſt took their departure to croſs the bay of Bengal, and make their paſſage to the Golden Cherſoneſe. This point, which has no name in Ptolemy, M. d'Anville has, with

[79] Twenty days in the ſhips of the country, ſeven in the veſſels from Egypt. Both diſtances are in exceſs; for, from Covalam to Point du Galle is little more than 200 miles.

[80] Barthema, lib. vi. c. 2.

[81] The poſition of Negapatam anſwers; but whether it is ancient, may be queſtioned.

[82] Written Maſalia in the Periplûs.

great propriety, fixed at Gordaware, a cape near the mouth of the Godavery, and from which it ſeems to take its name.

The whole of this courſe, from Ceylon to Meſolia, is in correſpondence with the Periplûs, and apparently with the account of the Arabs [83] in Renaudot. In all three, there is no appearance of a direct paſſage by the monſoon from Ceylon to the Golden Cherſoneſe; and if Ptolemy's traders paſſed from the Godavery at once to the oppoſite ſhore, it is the boldeſt [84] adventure of the whole.

Concerning the Ganges there is no difference; but the Kirrhádæ of the Periplûs are weſt of the Ganges, and thoſe of Ptolemy to the eaſtward. In this there can be little doubt that Ptolemy is the more correct; and unleſs a name deceives me, I find in his Kirrhádæ the Kadrange of the Arabs, and the Arracan of the moderns.

We are now to enter upon the Great Peninſula, comprehending provinces diſtinguiſhed by the titles of Gold, Silver, Braſs, and the Golden Cherſoneſe, off which lies an iſland of Barley, with its capital called the Silver City. The mere aſſemblage of theſe names is ſufficient to prove, that they are fictitious and imaginary; and received, as they muſt have been, by report, they muſt be attributed either to the vain glory or caprice of the reporters, and not to the invention of the Greeks. Yet even here, Ptolemy preſerves his privilege in recording ſome names that cannot be miſtaken, and which afford us the means of aſcertaining the country we are to enter on, however deficient we may be in particulars.

[83] The Arabs firſt mention the iſland of Najabulus, and then Betuma, or Meliapoor; if, therefore, Najabalus be the Nicobars, they croſſed half the bay of Bengal, and returned to the coaſt of Coromandel. D'Anville ſuppoſes Nichobar and Najabal equivalent.

[84] Scrupulous attention to the monſoons is neceſſary for croſſing the bay of Bengal, as I learn from the Oriental Navigator, and likewiſe to the parallel on which it is to be paſſed.

How little of the detail of this coaſt can be depended on, may be ſeen by comparing a few of the names with the poſitions aſſigned them by d'Anville and Goſſellin:

PTOLEMY.	D'ANVILLE.	GOSSELLIN.
Sada.	Sedoa.	Rajoo.
Berabona.	Barabon.	
Temala.	Cape Negrais.	Botermango.
Berobè.	Mergui,	Barabon.
Aurea Cherſoneſus.	Peninſula of Malacca.	Ava, and Daona. River of Ava.
Magnum Promontorium.	Cape Romania.	Pointe de Bragu.
Zaba.	Sincapura.	Bragu.
Magnus Sinus.	Gulph of Siam.	Martaban.
Sêrus Fluvius.	Menam. River of Siam.	River of Pegu.
Sinæ.	Cochin China.	Siam. Tanaſerim.

Now, though I am convinced with Goſſellin, that the Great Bay, the River Serus, and the Sinæ, are all weſt of the Straits of Malacca, and perſuaded that the Sinæ are in Siam, it is not neceſſary to accede to his opinion, that Sinæ [85] Metropolis is new in reſpect to Ptolemy, or that Ptolemy knew nothing of Java; for Iabadioo, according to Greek pronunciation, is ſtrictly Java-diu, the Iſland of Java. Ptolemy's poſition of this iſland is of no importance; for he has hardly one iſland correctly placed from Africa to Siam, and his ignorance of its extent is no more extraordinary than his augmentation of Ceylon. But the ſurprize is, that he ſhould have obtained the name of Java; and whether we attribute this to the iſland now called Java, or to Sumatra, which M. Polo calls Java Minor, the appellation itſelf may well excite our aſtoniſhment. There is, how-

[85] M. Goſſellin's opinion does not ſeem founded on the diſtinction between Sinæ and Sera Metropolis. If it were ſo, we muſt refer again to Thina of Eratoſthenes, compared with the Thina or Sinæ Metropolis of Ptolemy.

ever,

ever, only one point in Ptolemy which can cauſe any doubt reſpecting the poſition of the Sinæ in Siam; which is, the mention of Ta-mala and Malai-oo Kôlon; for however the firſt may be queſtioned, the ſecond ſo poſitively intimates the country of the Malays or Malacca, that we cannot help attending to the connection. The placing of this likewiſe in the neighbourhood of the Pirates, which has been the character of the Malays in all ages, contributes to the ſame ſuppoſition. I do not mention theſe circumſtances for the purpoſe of invalidating M. Goſſellin's ſyſtem, for upon the whole I accede to it; but ſtill the queſtion is not cleared of all its difficulties; and it ſeems highly probable, that as Marínus had no evidence from any one who had performed the voyage either to the Golden Cherſoneſe or Cattígara, that Ptolemy had no information which was conſiſtent to direct him.

That the voyage itſelf was performed by native merchants may nevertheleſs be admitted, not only as it may be collected from the accounts of later ages, but as it is aſſerted by Coſmas. Deſirous as I have been to find an earlier teſtimony of this, I have not ſucceeded; for though the Periplûs mentions the very large [86] veſſels fitted out on the coaſt of Coromandel, the limit of their progreſs was Khrusè, and ſhort of Ptolemy's Cattígara. The remainder of the courſe to China does not ſeem to have reached Europe, even by report [87].

What

[86] Kolandiophonta. See Capt. Wilford's Chronology of the Hindoos, As. Reſearches, vol. v. p 283. where he ſays, this expreſſion means *Coilan boats* or *ſhips*.

[87] At Tarnaſſari, as Barthema writes, which is nearly in the ſame ſituation as the point from whence the fleets ſailed, according to Ptolemy (Grynæus, p. 227. lib. vi. c. 12), His eſt varius multiplexque navigantium uſus, ſulcant alii maria *velocibus* complanatis admodum, quæ altiores aquas minime expoſcunt; alii navigant *Liburnicis* geminam proram habentibus, geminumque malum abſque tecto; eſt et *aliud onerariæ navis genus* quo enormia onera comportantur, nam ferunt aliæ ex memoratis onerariis navibus ſupra mille mercium dolia.

What then is the Golden Cherſoneſe? a queſtion eaſy to reſolve generally, but very difficult to apply in its reſult to the different authors who have mentioned it. It is the moſt diſtant country eaſt, according to Dionyſius [88] and the Periplûs: it is called an iſland by both; an iſland of the ocean, by the latter, and placed adjoining to the caſtern mouth of the Ganges. According to Mela, it is an iſland at the promontory Tamos. If Tamos [89] be the Tamala of Ptolemy, that cape muſt be either in Ava or Pegu, as we adopt the ſyſtem of d'Anville or Goſſellin; and if it muſt be an iſland [90], we might place it at the mouth of the Ava river, which paſſes through Pegu to the ſea, and forms many iſlands at its different mouths. Here alſo Goſſellin fixes his Golden Cherſoneſe, and the river Chryſoana; but Ptolemy has two provinces—one of gold, and one of ſilver—before he arrives at the Cherſoneſe; and if his Kirrhadia be Arracan, theſe provinces muſt be on the weſtern coaſt of Ava, above the Golden Cherſoneſe of his arrangement. All this mention of gold would ſurely direct us to ſome concluſion, from the general nature of the country; and it does ſeem very probable, that both

dolia. Imponunt his vaſtioribus navigiis cymbas, naveſque actuarias in urbem Malacha nomine deferendas, quibus captum proficiſcuntur aromata.

If Barthema had ſeen the Periplûs, he could not have employed language more conformable to it; for we have here the light veſſels, which anſwer to the ſangara and monoxýla; and others of a thouſand tons, correſponding with the kolandiophônta of our author: we have the ſame trade from Coromandel to Malacca, and the cargo obtained there conſiſts of ſpices and ſilk. P. 232.

[88] Lib. 589.

[89] Tamos promontorium eſt quod Taurus attollit. Mela, iii. 7.

If Taurus were the only difficulty here, we could frame a ſolution of it; for Taurus is found in China and at the Indus, and this might be a chain branching from it in Ava, according to the idea of Mela.

But that Tamos is Tamala, or ſomething near it, is evident; for it is added, ad Tamum inſula eſt Chryse..... Aurei ſoli.. aut ex re nomen, aut ex vocabulo ficta fabula eſt. Ibid.

[90] An iſland, or a cherſoneſe, are the ſame in Arabic, and from Arabs the Greeks poſſibly had their intelligence.

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the wealth and oſtentatious diſplay of it in Ava, Pegu, and Siam, may well have given riſe to the report which attributed ſo large a ſhare of the precious metals to this great peninſula. The glory of Pegu and Siam has ſunk under the aſcendant of Ava; but in all theſe courts, the exhibition of gold in their temples, public buildings, gallies, habits, and decorations of every kind was, while they exiſted, the ſummit of Oriental pomp, as it continues in Ava [91] to the preſent time; and if we ſhould chuſe to carry the Silver Metropolis of Iabadioo [92] to Sumatra, the ſplendour of Acheen, in its better days, would bear its proportion to the gold of Ava.

In this view it is natural to accede to the poſition of the Golden Cherſoneſe by Goſſellin; and if this be granted, his Sinæ and Cattígara in Siam follow of courſe. Some difficulties in the way of this concluſion have been already noticed, and a greater is, that Ptolemy ſhould be ignorant of the voyage to the Sêres; but doubtleſs he went as far as he was authorized by the information he had obtained. I feel a regret in acknowledging this, becauſe I ſhould rather have received the confirmation of this great geographer on the ſubject, than build it on inference or analogy. The evidence of Coſmas is all that remains, to prove that there was a communication by ſea between India and China; and this is the point material to inſiſt on, becauſe the intercourſe through Tartary, on the north, is indiſputable; and if both theſe means of approach be eſtabliſhed, the country of the Sêres muſt be China; for theſe circumſtances cannot be appropriate to any other country at the extremity of the Eaſt.

[91] See Symes's Embaſſy to Ava, pp. 186. 386. 413. 424. & paſſim.

[92] Ptolemy has dioo or diu in another form applied to a neighbouring group, Saba dibæ, which is Sava dive in the mouth of a Greek, fluctuating between the two letters like Selendib and Selen dive.

XI. LONGITUDES AND LATITUDES OF PTOLEMY, HOWEVER IN EXCESS, STILL THE CAUSE OF MODERN DISCOVERY; NAVIGATION TOWARDS THE WEST FROM SPAIN—ROGER BACON, COLUMBUS, MAP OF PTOLEMY; EULOGY OF PTOLEMY.

In the whole of the attempt in which I have been engaged, from the voyage of Nearchus to the close of the present work, it has been my endeavour to trace the progress of discovery, as carried on by the Greeks and Romans, from the time of Alexander to the reign of Justinian [93]; and the only object of consideration remaining is, the extent of their knowledge in Longitude and Latitude. The excess of longitude in Ptolemy is the subject of universal complaint; but this excess arises, in the first instance, from his assumption of five hundred stadia for a degree of a great circle; and secondly, from the vague method of calculating distances, by the estimate of travellers and merchants, and the number of days employed in their journies by land, or voyages by sea. Respecting this last source of error, Ptolemy was upon his guard; for he repeatedly corrects the excess resulting from the calculation of days by Marínus, and reduces it sometimes a third, and sometimes an half, or even more. After all, however, we have an hundred and eighty degrees from the Fortunate Islands to Cattígara, upon a space that in reality occupies less than an hundred and twenty. So that the ancients, instead of knowing one-half of the globe which we inhabit, in fact knew only one third: still they knew that the earth was a globe; and one cause of their error, among others, perhaps was, that they had a desire to cover as much of it as they could.

[93] The date of Cosmas, anno 547, is the 21st of Justinian.

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The error in latitude [94], on the contrary, was ſo ſmall, that in a view of this kind it is not worth regarding; for if we take it from the parallel through Thulè to the parallel through the Cinnamon Country, at eighty degrees, the difference from the truth is not more than ſix or ſeven degrees upon the whole, and with this we have little concern.

But upon the exceſs of longitude depended, ultimately perhaps, the grand problem of circumnavigating the globe, and the origin of modern diſcovery; for as Strabo [95] had ſaid, that nothing obſtructed the paſſage from Spain to India by a weſterly courſe, but the immenſity of the Atlantic Ocean; and as all the early navigators of Portugal had ſome acquaintance with Ptolemy, ſo from the firſt moment that the idea aroſe that a paſſage to India, or a circumnavigation, was poſſible, the account of Ptolemy leſſened the difficulty by ſixty degrees. When Columbus, therefore, launched into

[94] The latitude of Thulè is 64° north, in Ptolemy, and the parallel through the Cinnamon Country 16° 24′ ſouth; that is, 80° 24′ upon the whole.

[95] Ariſtotle ſeems the author of this ſuppoſition, as well as of moſt other things that are extraordinary in the knowledge of the ancients. See Bochart, Phaleg. 169.

Συνάπτειν τὸν περὶ τὰς Ἡρακλείους στήλας τόπον τῷ περὶ τὴν Ἰνδικήν.

"The parts about the Pillars of Hercules "join to thoſe about India." This is a nearer approach ſtill; but both ſuppoſitions ariſe from the contemplation of the earth as a ſphere. — Ariſtotle has alſo preſerved the opinion of the Pythagoreans, who made the Sun the centre of our ſyſtem, with the Earth and the other planets revolving round it, which is the hypotheſis adopted by Copernicus and eſtabliſhed by Newton. Strabo likewiſe, who left the phenomena of the heavens, and the form of the earth, to the mathematicians, ſtill thought the earth a ſphere, and deſcribes our ſyſtem agreeable to that which was afterwards adopted by Ptolemy; but he adds the idea of gravitation in a moſt ſingular manner: Σφαιροειδὴς μὲν ὁ Κόσμος καὶ ὁ Οὐρανός. ΠΡΟΣ ΤΟ δ' ἐστὶ τὸ μέσον τῶν βαρέων . . . . . ὁ δ' Οὐρανὸς περιφέρεται περί τε αὐτὴν καὶ περὶ τὸν ἄξονα, ἀπ' ἀνατολῆς ἐπὶ δύσιν. Lib. ii. 110.—"The earth and the heaven "are both ſpherical; but the tendency is to "the centre of gravity. The heaven is car-"ried round itſelf, and round its axis from "eaſt to weſt."—I barely ſuggeſt the extent of ancient knowledge on theſe queſtions; thoſe who wiſh to gratify their curioſity may conſult Stobæus, tom. ii. c. 25. ed. Heeren, Gotting. 1792, 1794; and Diogenes Laertius in Anaximander, Pythagoras, and Zeno, lib. vii. ſect. 155.

the Atlantic Ocean, he calculated upon ſixty degrees leſs than the real diſtance from Spain to India [96]—a ſpace equal to three-fourths of the Pacific Ocean; and when his courſe to India was ſtopped by the intervention of America, however his companions had been driven to deſpair by the length of the voyage, Columbus certainly met with land before he expected it, or at leaſt before any eſtimate of his longitude could authorize the expectation.

The prevalent opinion, in the middle centuries, of a paſſage from Spain to India, is preſerved in Roger Bacon; and his opinion is more worthy of regard, becauſe his ſyſtem is neareſt [97] to the actual proſecution of the attempt. He then informs us, that according to Ariſtotle there was but a ſmall ſpace of ſea between the weſtern coaſt of Spain and the eaſtern coaſt of India; and that Seneca mentions that this ſea may be paſſed in a few days, with a favourable wind. Ariſtotle [98], he adds, had his knowledge of the Eaſt from Alexander; and Seneca, his knowledge of the South from Nero, who ſent his centurions into Ethiopia. He might alſo have introduced the celebrated prophecy of Seneca the poet:

Venient annis ſæcula ſeris,
Quibus oceanus vincula rerum
Laxet, et ingens pateat tellus,
Tethyſque novos detegat orbes,
Nec ſit terris ultima Thule. Medea, l. 375.

A time will come, in ages now remote,
When the vaſt barrier by the ocean form'd
May yield a paſſage; when new continents,
And other worlds, beyond the ſea's expanſe,
May be explor'd; when Thulè's diſtant ſhores
May not be deem'd the laſt abode of man.

[96] India, in this ſenſe, means the firſt land he would meet with coming from the weſt, which would in reality have been China.

[97] Bacon died in 1294.

[98] Rogeri Bacon opus majus, p. 183. He cites Ariſtotle, de Cœlo et Mundo; and Seneca, in his fifth book, Nat. Quæſt.

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The Nuremberg Globe, as it is called, now publiſhed in Pigafetta's Voyage, favours the ſame opinion; in which the fartheſt iſle to the weſt is named Antille, the exiſtence of which was dubious, and yet the ſuppoſition of it was ſufficient to make Columbus think he had reached the Antilles when he diſcovered the firſt iſland in America. This diſcovery is the more extraordinary, as it was the effect of deſign, and not accident[99]; when accident would have produced the ſame effect not ten years later; for it was accident alone that carried Cabral to Brazil in 1500; and the arrival at Brazil would as infallibly have been proſecuted to the exploration of the whole continent, as the atchievement of Columbus.

But there is a circumſtance ſtill more ſingular, which attaches to this idea of a paſſage from Spain to India; for I have in my poſſeſſion, by favour of Lord Macartney, a copy of the map in the Doge's palace at Venice, drawn up for the elucidation of Marco Polo's travels, or at leaſt certainly conſtructed before the diſcovery of America; for in this map there is nothing between the eaſtern coaſt of China and the weſtern coaſt of Spain but ſea; and though the longitude is not marked on it, we may form an eſtimate by comparing this ſpace with others in the ſame ſheet, which are known. Now this ſpace meaſured by the compaſſes gives, as nearly as may be, the ſame diſtance from China to Spain, as from Ceylon to Malacca; that is, ten degrees, inſtead of an hundred and fifty; or leſs than ſeven hundred miles, inſtead of upwards of ten thouſand. I cannot aſſert that this is the genuine production of M. Polo[100]: it has

[99] At leaſt only ſo far accident, as meeting with America inſtead of India.

[100] The map, as it now appears, is very ill accommodated to M. Polo's travels, and if taken from an older one drawn up for that purpoſe, full of matter of a later date:

For, firſt, it carries him from China to Bengal by land, whereas he went by ſea.

has additions which belong not to his age, and contains much that he did not know; but it is evidently compoſed and adapted to his travels, and as evidently, more ancient than the diſcovery of America. We have in it, therefore, a guide to form our opinion of the geographers of that age, and the notions they had conceived of the unknown parts of the world; we have likewiſe the origin of thoſe concluſions which led Columbus to attempt a weſterly paſſage to India; in effecting this, he was only diſappointed by finding a continent in his way, which has cauſed a revolution in the commerce of the whole world, and which may ſtill cauſe other revolutions, incalculable in their effect, magnitude, and importance.

But if it is fruitleſs to look forward to future revolutions; we may at leaſt reverſe our attention, and direct it to thoſe great maſters in the ſcience, who firſt taught mankind to meaſure the ſurface of the earth by a reference to the phenomena of the heavens—to Eratóſthenes—to Hipparchus; and, above all, to Ptolemy, who firſt eſtabliſhed this ſyſtem on a baſis ſo firm, that as long as there ſhall be travellers and navigators in the world, it can never be ſhaken. The ſcience, however advanced, is ſtill only in a ſtate of progreſſion: it is ſtill conducted upon his principles, and is in reality nothing more than a correction of his errors. Thoſe errors were unavoidable, if we conſider the difficulty of all firſt attempts, and the

2. It delineates the Great Wall, which he never mentions.

3. It gives the Moluccа Iſlands in detail.

And, 4. It deſcribes the courſe of a Venetian ſhip, caſt of the Moluccas, in 1550, that is, almoſt ſixty years after the diſcovery of America; and on that occaſion mentions the Straits of Magellan. How this ſtrange inconſiſtency ſhould accord with that part of the map which gives no continent between China and Spain, is totally inexplicable; but that we cannot be miſtaken in calling it Spain, is ſelf evident; for we have the river [Guadil] Quivir, Corunna, and the Sierra Nevada, or Snowy Mountains of Andaluſia, all in their proper places.

ſlender

ſlender means of information in that age, compared with the advantages we poſſeſs at the preſent hour. But even his failures have conduced to the attainment of truth; and whatever reflections we may now caſt on an exceſs of ſixty degrees upon the meaſurement of an hundred and twenty, we muſt acknowledge, with d'Anville, that this, which was the greateſt of his errors, proved eventually [101] the efficient cauſe which led to the greateſt diſcovery of the moderns.

[101] La plus grande des erreurs dans la géographie de Ptolémée, a conduit à la plus grand des decouverts. Antiq. de l'Inde, p. 188.

DISSERTATION II.

ON

EZEKIEL, C. XXVII.

THE produce of India or Arabia, mentioned in the Scriptures, conſiſts of

Cinnamon [1].
Kaſia.
Sweet Calamus, Calamus aromaticus? or, Calamus odoratus?
Stactè, or Gum.
O'nycha, or Skekeleth, a black odoriferous ſhell [2].
Gálbanum, a gum or reſin.
Aloes.
Myrrh.
Frankincenſe.

Of theſe, cinnamon and kaſia are the only articles which can be attributed ſpecifically to India; and theſe, with all the others, were brought originally through Arabia into Egypt. Judêa, Phênicia, and Syria; and from theſe countries diſtributed round all the coaſts of the Mediterranean. How cinnamon and kaſia might have reached Arabia, by croſſing no more ſea than the breadth of the Perſian

[1] See Exodus, xxx. 23. et ſeq. Pſalm xlv. 8. Ezek. xxvii. 19.

[2] Parkhurſt in voce.

Gulph; or how they might have been conveyed to the coaſt of Africa, the reputed Cinnamon Country of the ancients, has already been ſufficiently detailed; it remains now to be ſhewn, that Tyre poſſeſſed the principal ſhare of this trade, from the earlieſt mention of that city in hiſtory, till its deſtruction by Alexander, and the foundation of Alexandria.

Tyre, in fact, enjoyed this commerce almoſt excluſively, except during the reign of Solomon, when Hiram found it his intereſt to unite with that monarch, who was ſovereign of Idumêa, in order to ſecure a port for his fleets in the Red Sea; and the certain means of conveying the imports and exports over-land, from the Red Sea to the Mediterranean. Solomon[1] however, though he exacted a tax upon ſpices, and contributions from the kings and governors of Arabia, and ſhared in the profits of the trade, ſtill had no fleets on the Mediterranean—no commerce on that ſea. This circumſtance gave Tyre a monopoly in regard to the whole communication with the Weſtern World; for though Egypt and Syria might receive the ſame articles from the Eaſt, we read of no fleets or commerce from theſe countries towards the Weſt, in the hands of their reſpective inhabitants.

The immenſe profits of this monopoly admit of calculation, if we dare truſt to the Hebrew numbers in ſcripture; but Dr. Kennicott has ſhewn, that in ſome inſtances the amount expreſſed by theſe has doubtleſs been exaggerated; and if the numeration by letters was uſed in the original tranſcripts of the ſacred writings, it is well known that numerary letters are more ſubject to error, corruption, or exaggeration, in the manuſcripts of all languages, than any other part of their text.

[1] 1 Kings, x. 15.

But

But let us ſuppoſe that the advantages of Hiram were equal to thoſe of Solomon, which is not unreaſonable if we conſider, that though Solomon enjoyed the profits of the tranſit, Hiram had the whole emolument of the commerce with the Weſt. Let us then obſerve that the revenue of Solomon is ſtated at ſix hundred and ſixty-ſix talents of gold, which, according to Arbuthnot, amount to three millions ſix hundred and forty-ſix thouſand three hundred and fifty pounds ſterling—an extravagant ſum at firſt ſight! but not impoſſible, if we compare it with the revenues of Egypt, which, after the building of Alexandria, enjoyed the ſame commerce, and the ſame monopoly. Even at the preſent day, when the grand ſource of Egyptian wealth is obſtructed by the diſcovery of the Cape of Good Hope, Sir Home Popham eſtimates the revenue at twenty[4] millions of dollars[5], equal to between four and five millions Engliſh; and when the ſame revenue, under the Roman government, may be eſtimated at three millions, which, allowing for the different ratio of ſpecie, may be taken at four times that amount. Let us reflect on theſe extraordinary ſums, before we conclude upon the impoſſibility of the ſame commerce, and the ſame monopoly, producing a revenue of three millions and an half to Solomon, upon the import and tranſit; and the ſame ſum to Hiram, upon the export. I dare not aſſert theſe to be facts, becauſe I think, with Dr. Kennicott, that numerary letters are liable to error; but the revenue of Solomon is twice[6] ſtated at the ſame ſum; and the contemplation

[4] Of all this revenue, notwithſtanding the Grand Seignor ſtyles himſelf maſter of Egypt, ſcarcely a ſhilling reaches Conſtantinople.

[5] Sir Home Popham's concile Statement of Facts, p. 154.

[6] 1 Kings, x. 14. 2 Chron. ix. 13. The great amount of this revenue is ſtill further increaſed by the declaration, that the 666 talents of gold were excluſive of the taxes upon the merchants. Verſe 14.

of

of the revenue of Egypt in the ſame ſituation; and under ſimilar circumſtances, admits of imputing an immenſe emolument to this commerce, wherever it became a monopoly.

I have been led into this diſcuſſion, upon which every one muſt form his own judgment, by the ſpecific detail of the Tyrian commerce, in the twenty-ſeventh chapter of Ezekiel, which, if we conſider it only as hiſtorical, without any reference to the divine authority of the Prophet, is not only the moſt early, but the moſt authentic record extant, relative to the commerce of the ancients; as ſuch, it forms a part of the plan which I have undertaken to execute. In this view I ſubmit it to the reader; and though I pretend not to any power of throwing new light on the ſubject, and deſpair of removing thoſe difficulties which ſurpaſſed even the learning of a Bochart fully to elucidate, ſtill there will not remain any general obſcurity which will prevent us from forming a right judgment upon the whole.

Tyre[7] was one of thoſe ſtates which had rejoiced at the deſtruction of Jeruſalem, and the captivity of Judah; it became therefore an object of prophecy to declare, that ſhe alſo was to fall by the hands of the ſame conqueror, who had ſubverted the throne of David; but ſo much more abundant were the means, or ſo much ſtouter was the defence of this commercial city, that the army of Nebuchadnezzar lay before it thirteen years; and it was not taken till the fifteenth after the captivity, in the year 573[8] before Chriſt; and when taken, it was ſo exhauſted by the ſiege, or ſo deſerted by the inhabitants, that the conqueror found nothing to reward him for his labours. Prideaux ſuppoſes this city to be the Old Tyre on the conti-

[7] Ezek. xxvi.

[8] Prideaux, vol. i. p. 72.

nent; and that the inhabitants took refuge on the iſland, where the new city flouriſhed again with almoſt the ſame vigour as its parent, till it was deſtroyed by Alexander in the year 332 A. C. two hundred and forty-one years after the reduction of it by the Babylonians. But, by the language of Ezekiel, it ſeems as if the city was upon the iſland in 573; for (in chapter xxvii. 3.) he ſays, Thou that art at the *entry*[9] of the ſea; and in the following verſe, and in c. xxviii. the expreſſion is, "I ſit in the *midſt* of the ſeas," or, as it is in the original, "in the *heart* of the ſeas." The queſtion is not of great importance; but as it roſe again after its firſt reduction, by means of its ſituation, and the operation of the ſame cauſes, thoſe cauſes ceaſed after its ſecond fall, by the removal of Oriental commerce to Alexandria; and from that period it gradually declined, till it has become a village under the deſolating government of the Turks; where Maundrel informs us, that he ſaw the prophecy of Ezekiel literally fulfilled[10]; for when he was there, the fiſhermen were "drying their nets upon the rocks."

EZEKIEL, c. xxvii.

In undertaking the elucidation of this chapter, perſpicuity is the only object in view; omitting, therefore, all conſideration of the ſublimity of prophecy, or the majeſty of language, I propoſe, firſt, to illuſtrate the commerce of Tyre in its various branches, by redu-

[9] *At the entering in of the ſea.* Newcombe. An expreſſion which ſeems to imply, the channel between the iſland and the main; but all the commentators unite in the ſame opinion with Prideaux.

[10] Ezek. xxvi. 14. Maundrel, p. 49. He ſays, it is not even a village, but that the few miſerable fiſhermen who inhabit the place, ſhelter themſelves under the ruins.

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cing the Hebrew appellations to the ſtandard of modern geography; and, ſecondly, to give a commentary on the whole, deduced from the beſt writers on the ſubject. By this method, due regard will be had to the convenience of one claſs of readers, and the curioſity of another; and although I pretend not to aſſign every ancient name, with preciſion, to its modern repreſentative, ſtill there will remain ſuch a degree of certainty upon the whole as to gratify all that have a pleaſure in reſearches of this nature.

Let us then, in conformity to the opening of the prophecy, conſider Tyre as a city of great ſplendour, magnificently built, and inhabited by merchants whoſe wealth rivalled the opulence of kings—who traded to the Eaſt by the intervention of Arabia, and to the Weſt by means of the Mediterranean; let us add to this, that in ages prior to the celebrity of Greece and Rome, their fleets had braved the dangers of the ocean, and their people were the only mariners who were not limited within the circle of the Mediterranean; that they penetrated eaſtward through the Straits of Death [11], which were the termination of the Red Sea, and weſtward beyond the Pillars of Hercules, which were the boundaries of all knowledge to every nation but their own; that they advanced northward to the Britiſh Iſles, and ſouthward to the coaſt of Africa on the Atlantic Ocean [12]. Let us contemplate theſe enterprizes as completed by the efforts of a ſingle city, which poſſibly did not poſſeſs a territory of twenty miles in circumference; which ſuſtained a ſiege of

[11] The Straits of Bab-el-mandeb, literally the Gate of Death.

[12] If this ſhould be thought dubious in regard to Tyre, it is undoubted in regard to its colony, Carthage. It is the univerſal opinion that the Phœnicians came to Britain; but in what age, may be a doubt. If they reached Gades only in the times here alluded to, it was paſſing the Straits of Calpè, which at that period no other nation did.

thirteen years againſt all the power of Babylon, and another, of eight months, againſt Alexander, in the full career of his victories; and then judge, whether a commercial ſpirit debaſes the nature of man, or unfits it for the exertion of determined valour; or whether any ſingle city, recorded in hiſtory, is worthy to be compared with Tyre.

After this general view of the ſplendour of the city, we may proceed to the particulars ſpecified in the Prophecy. Firſt, therefore, Tyre procured,

Verſe

5. From Hermon, and the mountains in its neighbourhood—Fir for planking.

   From Libanus—Cedars, for maſts.

6. From Baſhan, eaſt of the ſea of Galilee—Oaks, for oars.

   From Greece, or the Grecian Iſles—Ivory, to adorn the benches or thwarts of the gallies.

7. From Egypt—Linen, ornamented with different colours, for ſails, or flags and enſigns.

   From Peloponneſus—Blue and purple cloths, for awnings.

8. From Sidon and Aradus—Mariners; but Tyre itſelf furniſhed pilots and commanders.

9. From Gebal, or Biblos, on the coaſt between Tripolis and Berýtus—Caulkers.

10. From Perſia and Africa—Mercenary troops.

11. From Arádus—The troops that garriſoned Tyre with the Gammadims.

12. From Tarſhiſh, or by diſtant voyages towards the Weſt, and towards the Eaſt—Great wealth. Iron, *tin*, lead, and ſilver. Tin implies Britain, or Spain; or at leaſt a voyage beyond the Straits of Hercules.

Verſe

13. From Greece, and from the countries bordering on Pontus—Slaves, and braſs ware.

14. From Armenia—Horſes, horſemen, and mules.

15. From the Gulph of Perſia, and the iſles in that gulph—Horns [tuſks] of ivory, and ebony. And the export to theſe iſles was the manufacture of Tyre.

16. From Syria—Emeralds, purple, broidered work, fine linen, coral, and agate. The exports to Syria were the manufactures of Tyre, in great quantities.

17. From Judah and Iſrael—The fineſt wheat, honey, oil, and balſam.

18. From Damaſcus—Wine of Chalybon (the country bordering on the modern Aleppo), and wool in the fleece. The exports to Damaſcus were, coſtly and various manufactures.

19. From the tribe of Dan [13], ſituated neareſt to the Philiſtines—The produce of Arabia, bright or wrought iron, caſia or cinnamon, and the calamus aromaticus. In conducting the tranſport of theſe articles, Dan went to and fro, that is, formed or conducted the caravans. By one interpretation they are ſaid to come from Uzal; and Uzal is judged to be Sana, the capital of Yemen, or Arabia Felix.

20. From the Gulph of Perſia—Rich cloth, for the decoration of chariots or horſemen.

21. From Arabia Petræa and Hedjaz—Lambs, and rams, and goats.

[13] Dan and Javan may in this paſſage both be Arabian; but if Dan be a tribe of Iſrael, its ſituation is between the Philiſtines and Joppa; and the people of that tribe would lie moſt convenient for the caravans between Petra and Joppa. From Joppa the merchandize would be conveyed to Tyre by ſea, as it was at a later period from Rhinocolûra.

22. From

Verſe

22. From Sabêa and Oman—The beſt of ſpices from India, gold, and precious ſtones.

23. From Meſopotamia, from Carrhæ, and Babylonia, the Aſſyrians brought all ſorts of exquiſite things, that is fine manufacture, blue cloth and broidered work, or fabricks of various colours, in cheſts of cedar, bound with cords, containing rich apparel. If theſe articles are obtained farther from the Eaſt, may they not be the fabricks of India, firſt brought to Aſſyria by the Gulph of Perſia? or caravans from Karmania and the Indus, and then conveyed by the Aſſyrians in other caravans to Tyre and Syria? In this view the care of package, the cheſts of cedar, and the cording of the cheſts, are all correſpondent to the nature of ſuch a tranſport.

25. From Tarſhiſh the ſhips came that rejoiced in the market of Tyre, they repleniſhed the city, and made it glorious in the midſt of the ſea; and if we could now ſatisfy ourſelves, with Goſſellin, that Tarſhiſh means only the ſea in general, theſe ſhips might be either thoſe which traded in the Mediterranean, or thoſe which came up the Red Sea to Elath, or Leukè Komè, or any other port of Arabia. I am rather inclined to the latter, becauſe, from the nineteenth to the twenty-fourth verſe, every particular relates to the Eaſt, and apparently to the produce of India; but if we are to underſtand, literally, the joy of the ſhips in the harbour of Tyre, they muſt be thoſe of the Mediterranean; and this ſuppoſition accords beſt with the Tarſhiſh noticed in the twelfth verſe, which by the mention of ſilver, lead and *tin*, evidently alludes to Spain, and perhaps to the Britiſh Iſles.

Such

Such is the hiſtorical part of this ſingular chapter relative to the commerce of Tyre, and illuſtrative of all ancient commerce whatſoever. It is uttered, however, in an age when the Tyrian fleets no longer ſailed from Eziongeber, and when the commodities of the Eaſt were received by caravans from Arabia Petrêa, Sabêa, and Meſopotamia. From the time that Judah was ſeparated from Iſrael, there does not appear to have remained vigour ſufficient in either, to have maintained ſuch a power over Idumêa, as to have ſecured a communication with the Elanitic Gulph, for the only attempt to recover this influence was made by the united efforts of both kingdoms, and a treaty between their two kings, Jehoſaphat and Ahaziah; but the attempt was ſuperior to their united force, and their ſhips were broken in Eziongeber. From this period [14], and probably from the termination of Solomon's reign, the Tyrians had no ſhips on the Red Sea, and ſupported their communication with it by land only; their track varying as the power of the neighbouring countries fluctuated. This point it is not neceſſary to inſiſt on, but in an age poſterior to the prophecy, and long after the ſecond capture of the city by Alexander, we find that a line of intercourſe was open between Rhinocolûra [15] and Petra. It is not, however, the object of the preſent inquiry to go lower than the ſecond ſiege; but barely to mention, that even under the Roman Empire a ſpirit of

[14] 2 Chron xx. 35. Jehoſaphat at firſt refuſed a junction with Ahaziah; and, after complying with it, Eliezer declared, that was the reaſon why the power of God was exerted to defeat the undertaking.

[15] See Strabo (lib. xvi. p. 781.) where he mentions expreſsly the courſe of the caravans from Leukè Komè to Petra, and from Petra to Rhinocolûra. Rhinocolûra is the limit between Egypt and Paleſtine—the El Ariſh, ſo much noticed during the continuance of the French in Egypt. The diſtance may be compared with that between Elana and Gaza (p. 759.), which is ſtated at 1260 ſtadia, or 160 miles. Rhino-colûra is a Greek term, derived from the practice of cutting off the noſes of the malefactors ſent to garriſon this frontier of Egypt.

commerce

commerce ſubſiſted ſtill in Phœnicia, and that Berytus and Tyre [16] were celebrated for their manufactures of ſilk, glaſs and ſalt, however obſcured by the ſplendour of Alexandria, and the eſtabliſhment of that city as the centre of Oriental commerce under the power of the Romans.

Over ſuch a ſeat of mercantile power, opulence, and magnificence, at the period when it was ready to be overwhelmed by the invaſion of the Babylonians, we may be allowed to breathe the ſigh of commiſeration, however we reſign ourſelves to the juſtice of Providence in its deſtruction; idolatry, pride, luxury, and intemperance, we learn from the following chapter, were the cauſe of its puniſhment, and the inſtrument commiſſioned to inflict it, was an oppreſſor equally idolatrous and proud.

It remains only to ſubjoin the authorities, on which, known appellations have been ſubſtituted for Hebrew terms; on this head, if complete ſatisfaction is not attainable, we may, at leaſt, hope for ſome indulgence, and much deference to the names of Bochart, Michaelis, Houbigant, and Archbiſhop Newcombe, the learned tranſlator of the Prophet; and if I ſometimes interpoſe a ſuggeſtion of my own, let it be conſidered as a conjecture, and ſubject to the corrections of thoſe who are better qualified as judges of Hebrew literature than myſelf.

[16] See Lowth on Iſaiah, c. xxiii. laſt note.

COMMENTARY

ON

EZEKIEL, C. XXVII.

THE four firſt verſes repreſent to us the ſituation of Tyre: it is placed at the entering [17] in of the ſea—in the midſt of the ſeas—in the heart of the ſeas; expreſſions which ſeem to intimate that the city was on an iſland [18], but the general opinion of the commentators places it on the main, and call it Palæ Tyrus, or Old Tyre, in contradiſtinction to the new city, which roſe on the iſland out of the remnant of the inhabitants that fled from the king of Babylon. Its ſplendour [19] is deſcribed as *perfected* in beauty.

V. 5. Senir furniſhed fir for ſhip boards (planking); and Lebanon, cedar for maſts.

[Sanir, vulgate, ſeptuagint.

Firs, rendered cedars, ſept. but firs, vulg. Chald. Newcombe.

Cedars, rendered cypreſs, ſept.

Cedars, ארז, arez. Michaelis ſays, the preſent inhabitants of Lebanon uſe ארז for a tree that anſwers to the cedar. See Parkhurſt in voce רזה, and in בְּרוֹשִׁים, firs.]

Senir is part of Hermon (Deut. iii. 9.) "Hermon the Sidonians "call Sirion, and the Amorites call it Shenir." (1 Chron. v. 23.) "Manaſſeh encreaſed from Baſhan to Baal Hermon, and Senir, and "Mount Hermon. Newcombe."—Hermon is a branch of Antili-

[17] Newcombe's Tranſlation.

[18] צור, Tſor, Tſoor; from whence Συρια and Syria, ſignifies a rock. May it not be the rock in the ſea on which Tyre was built? Is Palæ-Tyrus on a rock?

[19] See Bochart, Phaleg. 303, where its origin and magnificence are deſcribed.

banus, from which the ſprings of Jordan iſſue; and thus very properly joined or contraſted with Lebanon. Lebanon ſignifies white, and ſnow lies upon Lebanon in ſummer.

V. 6. Baſhan produces oaks, for oars. Baſhan is the Batanêa of the Greeks, eaſt of the ſea of Galilee, poſſeſſed by the half-tribe of Manaſſeh. "We do not readily ſee why cedars ſhould be "adapted to maſts, or oaks uſed for oars. Cedar, however, is "light; but oaks have neither elaſticity or levity, but ſtrength "only. Houbigant alone renders it alders, for this reaſon." Abp. Newcombe.

בתאשרים Bath-Aſhurim, rendered Aſhurites in our Engliſh Bibles; but in the margin, Chaldee and Parkhurſt, *box tree*; as if from תאשור Thaſhur, and ſo בתאשרים Bathaſhurim, in one word. The whole ſentence would then ſtand thus, as Archbp. Newcombe renders it: "Thy benches have they made of ivory, inlaid in box, "from the iſles of Chittim." The Chaldee ſeems to refer theſe to the ornament of houſes, &c.; but the vulgate has, expreſsly, *tranſtra*, or *the thwarts* of gallies; and our Engliſh Bible, *hatches* in the margin. Chittim is applied to Cyprus by Joſephus—to Macedonia, in the firſt book of Maccabees; but to Italy and the iſlands round it, particularly Corſica, by Bochart. Lowth on Iſaiah xxiii. conſiders Chittim as comprehending all the iſles and coaſts of the Mediterranean; and Jerome, as the iſlands of the Ionian and Egêan Sea. The latter appear to correſpond beſt with the importation of box wood from Cytôrus in the Euxine, the place moſt celebrated, poetically, for that production; and the box wood of Pontus and Aſia Minor is imported at this day into the Port of London, from Smyrna. The Chaldee renders it Apulia, and the vulgate, Italy.

V. 7. Fine

V. 7. Fine linen of various colours, from Egypt, was uſed as a ſail or rather, as a flag for enſigns. (Vulgate, Chaldee, Newcombe.) Scarlet and purple, from the Iſles of Eliſha, for a covering or awning to the galleys. Scarlet is rendered by Hyacinthus in the vulgate and Chaldee, that is, the colour of the Amethyſt; and the Iſles of Eliſha are Elis, Hellas, or Peloponneſus. The purple of Laconia was the fineſt dye next to the Tyrian; and the purple cloth of that province was poſſibly employed, becauſe it was cheaper than that of Tyre, which was reſerved for the uſe of kings. Eliſha is one of the ſons of Javan (Gen. x. 4.); and as Javan is the general title for the Greek nation, Eliſha may juſtly be taken for a part. (Bochart, Phaleg. 155.)

V. 8. Zidon and Arādus furniſhed mariners, but the pilots or commanders were Tyrians; "Thy wiſe men, O Tyrus, that were "in thee, were thy pilots." Zidon is too well known as the parent of Tyre, to require further notice; but Arádus is on an iſland like Tyre, at the mouth of the Eleutherus, to the north of Tripolis, and much celebrated for its commerce by the ancients. In the modern title of Ruad, it preſerves a nearer reſemblance to the Hebrew Aruad, than to the Greek Arádus. Bochart (Phaleg. 305.) gives a large account of this place from Strabo, lib. xii. 753. conſiſting of many intereſting particulars.

V. 9. The ancient inhabitants of Gebal were caulkers in the harbour of Tyre: they were mariners likewiſe, bringing merchandize to that city (Chaldee); or ſailing in the Tyrian ſhips to the weſtward of the Weſt; ἐπὶ δυσμὰς δυσμῶν (in occidentem occidentis, ſeptuag.); to the extremity of the Weſt. Perhaps we find a rudiment of this reading in the Hebrew; for Archbp. Newcombe obſerves,

ſerves, that five manuſcripts read לְעֵרוֹב layarobh, the *evening*, or *weſt*, which the ſept. followed, probably inſtead of לְעֵבֶר layabhar, *beyond*. If this could be admitted, the extremity of the Weſt would at leaſt be Spain, and might be Britain. Gebal, according to Bochart, is Biblos; and Gebail is the name of that place at this day, according to the poſition of d'Anville in his Map of Phœnicia. Laodicææ propinqua ſunt oppidula Poſidium, Heraclium, *Gabala* deinde Aradiorum maritima regio. (Bochart, 305. from Strabo, lib. xii. 753.)

V. 10. Perſia, Lud and Phut, furniſhed ſoldiers for the armies of Tyre.

V. 11. The Aradians and Gammadim formed the garriſon of the city.

Perſia and Arádus are ſelf-evident. Lud and Phut are rendered Lydians, and Libyans or Africans. (Vulg. ſept. and Chaldee.) But Bochart and Michaelis think Lud an Egyptian colony, from Gen. x. 13. where Ludim is the ſon of Miſraim; and Miſraim, the ſon of Ham, is Egypt. Bochart, however, conſiders Lud as both Lydia and Africa; but joined with Phut, as it is in this paſſage, it is more applicable to the latter, for Phut is the brother of Miſraim. (Phaleg. 294.)

In this circumſtance we find, therefore, that Tyre, like its colony Carthage, employed mercenary troops while the natives were wholly addicted to commerce. Gammadim is rendered Cappadocians. (Chaldee.) Medes. (ſept.) Pigmees. (vulgat.) (from גמל Gamal, ſeſquipedales,) and Phœnicians by Newcombe, but he adds Gamarim or Gomerim is in 8 MSS. and Gomer according to Bochart is Phrygia; (p. 172.) the true meaning ſeems irrecoverable. Still we may

may ſee that the Perſian and African [20] mercenaries were for foreign ſervice; and the Aradians as joined in the ſame commercial intereſt were entruſted with the defence of the city.

V. 12. Tarſhiſh was a merchant in the multitude of all kind of riches, and traded in ſilver, iron, tin and lead; the mention of tin naturally ſuggeſts the idea of Britain, and that the Tyrians did come to Britain, is aſſerted by the general teſtimony of the ancients; but what Tarſhiſh is, remains to be determined after all that has been written by every author that has touched upon the ſubject. Bochart has no doubt of its being Tarteſſus [21] in Spain, near the Straits of Gibraltar, and the articles of ſilver and lead might doubtleſs be procured in that country; but whether tin could be collected there as a general cargo is highly dubious; for though Diodorus mentions that tin was found in Spain, the bulk of that metal was only obtainable in Britain; and as it is univerſally confeſſed that the Tyrians viſited Britain, they might rather have gone thither to purchaſe it at firſt hand, than buy it in Spain, where it muſt have been enhanced by the expence of importation, and the profit of intermediate merchants. Be this however as it may, it is evident by the articles mentioned, that this was a weſtern voyage, and ſo far whether to Spain or Britain is immaterial, for the great difficulty is, that Tarſhiſh in ſcripture as clearly applies to an eaſtern voyage down the Red Sea, as to a weſtern one towards Spain; this appears in the

[20] The modern Carthage, as the French call England, is ſaid to be raiſing at this time a body of Africans for ſervice in the Weſt Indies. The omen is not auſpicious, and the deſign is probably abandoned.

[21] Lamy objects to this very juſtly, that Tarſhiſh is mentioned as a precious ſtone by Moſes, before Tarteſſus could be in exiſtence. He thinks Tarſhiſh ſignifies gold, or a ſtone the colour of gold, the chryſolite or topaz; and that the voyage of Tarſhiſh had a reference to this, as gold and precious ſtones were the produce of it. See Introd. à l'Ecriture, cap. iv. p. 425.

voyage

voyage mentioned in the firſt of Kings (x. 22.) " Solomon had at " ſea a navy of Tarſhiſh with the navy of Hiram." This was in the Red Sea, and brought a very different cargo—gold, ſilver, ivory, apes and peacocks, (2 Chron. ix. 21.) and (again xx. 36.) Jehoſaphat joined with Ahaziah to make ſhips to go to Tarſhiſh, and they made ſhips in Eziongeber; ſo likewiſe, (1 Kings, xxii. 48.) Jehoſhaphat made ſhips of Tarſhiſh to go to Ophir for gold; and as the whole of this, by the mention of Eziongeber, directs us eaſt to the Red Sea; ſo does the flight of Jonah as evidently direct us to a voyage weſt, on the Mediterranean, for the Prophet takes ſhipping at Joppa in order to flee to Tarſhiſh.

For the purpoſe of reconciling theſe two oppoſite ideas, M. Goſſellin ſuppoſes, that Tarſhiſh means the ſea in general, and he likewiſe ſuppoſes two voyages eaſtward, one to Ophir in Hadramaut, and another to Tarſhiſh, which he ſtates as no diſtinct place; but that the expreſſion intimates a coaſting voyage down the African ſide of the Red Sea, in which they touched at ſeveral different ports, and were delayed by the change of the monſoon. The former part of this hypotheſis, that Tarſhiſh ſignifies the ſea in general, I wiſh to adopt; and there is little to contradict this opinion, except the verſe itſelf now under conſideration; but in regard to two eaſtern [22] voyages, one to Ophir, and another down the weſtern ſide of the Red Sea at large, I have great doubts; I ſhall, therefore, firſt collect the ſuffrages of the interpreters, and then compare the principal texts of ſcripture concerned; after this, if the difficulty is

[22] 1 Kings, xxii. 48. " Jehoſhaphat made " ſhips of Tharſhiſh to go to Ophir for gold." Here the ſhips of Tharſhiſh are thoſe that go to Ophir; and this concludes againſt the two voyages of Goſſellin, one to Ophir and one to Tharſhiſh.

ſtill

ſtill incapable of ſolution, no blame will attach to a failure which is common to ſo many writers of erudition and diſcernment.

Tarſhiſh is rendered Carthage in the vulgate; but the objection to this, is, that though tin and lead might be purchaſed in Carthage, as platina and tutaneg may be obtained in London, yet this is not enough; the whole chapter ſpecifies the diſtinct produce of the ſeveral countries, and not the places where the produce might accidentally be found.

The ſeptuagint render it Chalcedon [23], which is a city on the Boſphorus; but this ſeems to have ariſen from a reference to the firſt ſenſe of Tarſhiſh, which is a precious ſtone, (Parkhurſt ſays the topaz) but, however, it may be doubtful whether a Chalcedony (which is an agate) or whether a topaz is meant by the ſeptuagint. The rendering of Tarſhiſh by Chalcedon is evidently an alluſion to the name of a precious ſtone.

The Chaldee Paraphraſe ſays expreſsly מִן יַמָּא Min yama; *de mari* adducebant mercimonia, which is in conformity with Goſſellin's opinion.

The Engliſh Bible and Newcombe's tranſlation preſerve the Tarſhiſh of the original.

Let us next obſerve the uſage of this term in ſcripture. It occurs firſt in Gen. x. 4. where the ſons of Javan are Eliſhah, Tarſhiſh, Kittim and Dodanim. Now Javan is the general name for Iônes [24] or Greeks, and his deſcendants ought to be the diviſion of that nation, as the ſons of Miſraim, (Gen. x. 13.) are the diſtinctions of the tribes of Africa. In conformity to this, Eliſhah has been rendered Elis, Hellas, or Peloponneſus; Kittim the Greek Iſles, or per-

[23] Χαλκηδὼν and Καρχηδὼν are eaſily interchanged.

[24] Daniel, viii. 21. מֶלֶךְ יָוָן Melek Javan, the King of Grecia, id. x. 20. xi. 2.

haps

haps Macedonia; and Dodonim Dodona, or the weſtern ſide of Greece towards the Hadriatic. What then would be Tarſhiſh? Bochart and others are not content with this; he ſuppoſes Kittim to be Italy, and Rodanim [a] for Dodanim, to be Gaul about the Rhodanus or Rhone, and Tarſhiſh to be Spain; that is Tarteſſus. Parkhurſt likewiſe admits Tarteſſus, and Michaelis imagines, that the fleet fitted out at Eziongeber, circumnavigated the continent of Africa to reach Tarteſſus by the Indian and Atlantic Ocean. This ſolution he aſſumes, becauſe the voyage was of three years continuance, and becauſe Solomon had no ports on the Mediterranean. The latter reaſon cannot be admitted while Solomon and Hiram had a joint concern; for during that union, the fleet might have ſailed from Tyre. But the three years allowed for the voyage are not ſufficient, if calculated by the voyage of the Phœnicians ſent by Neco, which is probably the ground of Michaelis's eſtimate; for they were three years in reaching the Mediterranean; and conſequently the voyage round Africa to Tarteſſus, and back again, would require not three, but ſix years for its completion.

Upon a view of theſe difficulties, if we ſhould return to Javan, and wiſh to eſtabliſh all his family in Greece, we ought to find a ſituation for Tarſhiſh in that country; and if this cannot be done, it muſt be confeſſed that the poſition of Tarſhiſh cannot be diſcovered by the text of Geneſis the tenth. Omitting this, therefore, for the preſent, we may proceed to other paſſages connected with the ſubject of inquiry.

It has been proved already (from 1 Kings, xxii. 48.) that the ſhips of Tarſhiſh built by Jehoſhaphat at Eziongeber, went eaſt to Ophir,

[a] Rodanim is not merely an aſſumption of Bochart's; it is read in ſeveral MSS. and in the margin of our Engliſh Bible. The daleth and reſh are eaſily interchanged: ר for ד.

and (from Jonah, i. 3. iv. 2.) that Jonah, by embarking at Joppa, fled weſtward on the Mediterranean. Now the ſea is common to both theſe voyages, but no one ſpecific place, country, or city, can be common to both; and upon a careful examination of all the paſſages adduced by Goſſellin, and all that are to be found in the concordance, there is not one which may not be rendered juſtly by *the ſea*, as Goſſellin has aſſerted. The Vulgate and the Chaldee vary in different places, but the prevailing conſtruction is *mare* or *maria*; and the Vulgate (on the 1 Kings, x. 2. xxii. 49.) has ſhips of Africa, which might give riſe to the opinion of Monteſquieu and Bruce, that Ophir was at Sofala; but Africa is itſelf a ſuſpected term in Hebrew; for it is Latin, not uſed by the Hebrews, whoſe phraſe was Lubim, and little by the Greeks[25], who adopted Libya from the ſame origin; but in the Chaldee it is in ſo many letters אפריקה Africa (1 Kings, xxii. 49), and this term is doubtleſs, in compariſon, modern. The other texts are, if any one ſhould wiſh to examine them. (2 Chron. ix. 21. xx. 36, 37. Pſalm xlviii. 7. Thou breakeſt the ſhips of the ſea, lxxii. 10. the kings of Tharſis; kings beyond ſea in Sabêa. Iſ. ii. 16. xxiii. 1. the burden of Tyre, howl ye ſhips of Tarſhiſh, naves maris. Vulg. Chald. ibid. ver. 6. Paſs ye over to Tarſhiſh, tranſite maria. Vulg. Chald. and at ver. 10. Tyre is called daughter of Tarſhiſh בַּת תַּרְשִׁישׁ Bath Tarſhiſh, daughter or virgin of the ſea, Filia maris. Vulg. And what appellation can be more proper, for ſuch a city which owed its exiſtence to the ſea? Iſ. lx. 9. ſhips of Tarſhiſh, naves maris. Vulg. Chald. lxvi. 19. I will ſend them that eſcape to Tarſhiſh, ad gentes in mare. Vulg. ad provincias maritimas. Chald.)

[25] Perhaps never till after their connection with Rome.

Upon the evidence of all theſe paſſages, there is no heſitation in ſubſcribing to the opinion of Goſſellin, but his double voyage down the Red Sea is by no means equally apparent. There is likewiſe great reaſon to adopt Parkhurſt's idea, that they were large and ſtrong ſhips, fit for diſtant voyages; or if the reading of the ſeptuagint (Ez. xxvii. 9.) could be admitted, we might add, that they were ſtout enough to paſs (ἐπὶ δυσμὰς δυσμῶν [26]) to the extremities of the weſt, to the Atlantic and Britain; or to the eaſt, through (Babel Mandeb) the Straits of Death, and ſo to the ſouthern coaſt of Arabia. This account we have from ſcripture, and it is clear; but the voyage to Britain, though generally admitted, is far more problematical, for the evidence of Strabo [27] goes only to prove, that a Phenician veſſel was run aſhore in order to deceive the Romans, which muſt relate to a much later period; and the teſtimony of Diodorus Siculus [28] intimates, that even in his time, tin was brought from Britain, through Gaul, by a land carriage of thirty days, to the mouth of the Rhone, or perhaps to Marſeilles. Still that the Tyrians did obtain tin is manifeſt from Ezekiel, and that they paſſed the Straits of Calpé, and reached Gades at leaſt, is certain, for the temple of Hercules in that iſland was the Melcartha [29] of Tyre, whom, from his attributes, the Greeks ſtyled the Tyrian Hercules.

V. 13. Javan Tubal and Meſhech dealt in ſlaves and veſſels of braſs, intimating probably that they *all* dealt in ſlaves, for ſlaves came out of the Euxine and the countries round it in all ages into Greece, and ſtill

[26] That we may not miſlead, it is neceſſary to obſerve, that this term is not uſed in the verſe under contemplation, but in v. 9. I wiſh to find any where an extreme weſtern voyage, to Gades or to Britain, which I muſt confeſs is not perfectly clear.

[27] Strabo, lib. iii. p. 175.

[28] Lib. v. 347. Weſſ.

[29] Melcartha is Melek Cartha, the King of the City. Bochart.

come to Conſtantinople. The Greeks of courſe carried theſe or others which they obtained by piracy to Tyre as well as other maritime cities. Braſs veſſels will apply more particularly to Tubal and Meſhech, which are uſually rendered Tibareni and Moſchi, who, with the Chalybes and other inhabitants of the north-eaſt angle of Aſia Minor, have been in all ages, and ſtill are the manufacturers of ſteel, iron, and braſs, for the ſupply of Armenia, Perſia, Greece, and all the eaſtern countries on the Mediterranean. (See Buſching and Michaelis cited by Newcombe on this paſſage, and Bochart.) Tubal and Meſhech are generally mentioned together in ſcripture, and Tubaleni is as naturally Tybareni, as Meſheck, which the Chaldee reads Moſock, is Moſchi, while Javan, Tubal and Meſheck are all ſons of Japhet. (Gen. x. 2.)

V. 14. Togarmah traded in horſes, horſemen and mules, which Bochart ſuppoſes to be Cappadocia, (p. 175, Phaleg.) but Michaelis with much greater probability, Armenia, for Armenia and Media were the countries where the kings of Perſia bred horſes for the ſervice of themſelves and their armies, and in later times Armenia paid its tribute from this ſource. See Newcombe, who cites the Greek Scholiaſt on Ezekiel, and Ez. xxxviii. 6. The Chaldee renders it unaccountably by Germania. The objection to aſſuming Armenia for Togarma, is, that Armenia is in every other paſſage repreſented by Ararat. (See particularly 2 Kings, xix. 37. and Iſaiah, xxxvii. 38. and Jeremiah, li. 27.) I have not had an opportunity of conſulting Michaelis Spicileg. Geographicum, and can judge of it only as it is cited in Newcombe.

Ver. 15. Dedan is mentioned in conjunction with the merchants of many iſles; they brought horns (tuſks) of ivory and ebony.

Dedan is ſtrangely rendered by the ſeptuagint Rhodians. They muſt, therefore, have read a reſh for a daleth; but Dedan [30] is doubtleſs on the ſouthern coaſt of Arabia, for he is mentioned (Gen. x. 7.) with Seba, Havilah, Sheba and Raamah, all nations of Arabia and on the ſouth. There is ſtill a Dadena on the coaſt of Oman, oppoſite to Cape Jaſque; and a Rhegma, within the Gulph of Perſia, not far from Moçandon, is found in Ptolemy, correſponding with Raamah or Rahmah, in the opinion of Patrick. Without, however, inſiſting on theſe reſemblances, we may be certain of the country from the other names with which it is united, and its produce; for ivory and ebony are furniſhed only by India and Africa, and the province of Oman deals with both. If we read *horns* of ivory, with our Engliſh Bible, they are the *tuſks* reſembling horns. If horns and ivory, with archbiſhop Newcombe, the horns from the iſles may be tortoiſe-ſhell, peculiar to the iſles of India; and ebony, if Virgil be good authority, is found in India and nowhere elſe.

Sola India nigrum,
Fert Ebenum. Georg. ii. 117. Newcombe.

It is evident, therefore, that we are here firſt introduced to Oriental commerce, and from this verſe to the 25th, every article ſpecified is from the eaſt, and every place mentioned, is to the eaſt of Tyre, or connected with the trade eaſtward. To thoſe who have a curioſity on this ſubject, this is the moſt remarkable ſingularity of the chapter, and the eſtabliſhment of the fact will be ſelf-evident. The Chaldee renders horns by *cornibus caprearum*, and adds *pavones*, from the general ac-

[30] I follow Bochart and Michaelis in placing Dedan on the eaſtern coaſt of Arabia, and I think they are right; but Dedan is mentioned with Tema, Jer. xxv. 23. and with Eſau, xlix. 8. Tema is by Niebuhr ſuppoſed to be the Tehama, or coaſt of Arabia, on the Red Sea; and Eſau is in Hedjaz. This makes a difficulty; but the countries mentioned with Dedan, and the articles imported, indicate the ſouth-eaſt angle of Arabia.

counts.

counts of the voyage to Ophir, but neither of these additions is justified by the text.

V. 16. Syria was the purchaser of the manufactures of Tyre; and the Syrians brought in return, emeralds, purple, embroidered work, fine linen, coral, and agate. Syria, in the original, is Aram or Aramêa; and Aram, in scripture, is sometimes Mesopotamia, sometimes Damascus [31], and likewise the country about Libanus, and the Orontes. Emeralds, fine linen [32], coral, and agate, are doubtless from the East; but as to the appropriation of these names specifically to different precious stones, it is quite indeterminate. Fine linen, and embroidered or variegated work, may be the cottons or muslins from India, but is too general a term to be depended on. Still, upon the whole, we may imagine, that all these are articles brought by land from the Gulph of Persia, through Mesopotamia or Damascus, in exchange for the manufactures of Tyre. Purple and fine linen are frequently united in the language of Scripture, and the usual interpretation is, fine linen of a purple colour; of this, though Michaelis says purple would not be brought to Tyre, but exported from it, there might be an importation (see Newcombe in loco) from India through this channel.

V. 17. Judah and Israel brought to Tyre wheat of minnith [33], or fine wheat (Vulg. Sept. Chaldee), and pannag, perhaps panicum, millet or doura, with honey, oil, and balsam. There is little fluctuation in the versions; and though pannag may be dubious, the other articles are the natural produce of Judah and Israel; and balsam is

[31] Aram-Damasek is Damascus, the proper capital of Syria.

[32] בוץ Butz, Byssus, every where rendered fine linen, is supposed every where to be cotton.

[33] Minnith occurs in no other passage. Minni is used for Ar-menia, but can have no application here.

from

from Jericho, where the plant which produces it grew in Maundrel's time.

V. 18. Damaſcus received the richeſt manufactures of Tyre, in exchange for wine of Helbon, and white wool, that is, wool in the fleece or unwrought. If Tyre bought wool in the fleece, and manufactured it, it is the ſame policy as Flanders adopted formerly in regard to the wool of England. The wine of Helbon is the Chalybon of the Greeks; the kings of Perſia drank no other. (Newcombe from Strabo.) Syrian wine is ſtill celebrated, and Laodicêan wine is an article of commerce in the Periplûs. The Eaſtern name of Aleppo is ſtill Haleb; and Haleb, Halebon, or Chalybon, are only varied by different aſpirates or Greek terminations. The river Chalus, which Xenophon mentions in the expedition of the ten thouſand[34], muſt be near the preſent Aleppo, or the very ſtream which at this day ſupplies that city with water. Damaſcus lies upon the route from Aleppo to Tyre; and to Aleppo the diſtance is about double that to Tyre.

V. 19. Dan and Javan, *going to and fro*, brought iron[35], and caſſia, and calamus: the two laſt articles are evidently Oriental, and Indian iron is likewiſe a part of the Eaſtern invoice in the Periplûs. We are therefore to look for this Javan, not in Greece, as before, but in Arabia, and to point out the diſtinction between the two Javans. The adjunct of the name, rendered in our Engliſh Bible *going to and fro*[36], is in the original Me-Uzal; and Uzal is explained by Gen. x. 27. where Uzal is the ſon of Joktan, joined with Hazar-

[34] See Cyri Exp. p. 254. Leuncl. See alſo Ruſſel's Aleppo, where it ſeems the river Koick, chap. i.; and d'Anville's Map of the Tigris and Euphrates.

[35] Bright or wrought iron, in the original.

[36] From אָזַל azal, to go.

maveth

maveth (Hadramaut), Sheba, Ophir, and Havilah; all which we know to be in Arabia, and conſequently Javan [37], Me-Uzal, is ſo likewiſe. It is unwillingly that I drop the ſenſe of *going to and fro*, becauſe it expreſſes the practice of a caravan; but the retaining Uzal as a proper name, is juſtified by the Vulgate [38] and Sept. and approved by Newcombe, and Michaelis, who adds, from Golius, Azal nomen Sanaæ quæ metropolis Arabiæ felicis. Michaelis alſo ſuppoſes Dan to be Vadan, and a city of Arabia; but of Vadan [39] there are no traces in Gen. x.; if it is Dan, one of the tribes of Iſrael, his ſituation is between the Philiſtines and Joppa, placed very commodiouſly for receiving the caravans from Arabia in that age, which came to Rhinocolûra in a later; and equally convenient for embarking at Joppa the commodities brought by the caravans to be conveyed to Tyre. Be this as it may, the traffic is undoubtedly Arabian, and from the ſouthern [40] coaſt; for (קִדָּה) khiddah, is caſſia, the caſſia lignea of the ancients, from (קִד) khad, to cut or divide lengthways, in contradiſtinction to kaſia fiſtula [41], the pipe cinnamon, which we now prefer. The (קָנֶה) khaneh likewiſe, or reed, if it be the calamus aromaticus, is of Indian growth. There can be no doubt therefore remaining, but that this verſe fully eſtabliſhes the intercourſe of Tyre with India, through the intervention of Arabia; and no doubt that the Arabians went to India, or ſhips of India came to Arabia. This circumſtance conſequently muſt have taken place previous to the ſiege of Tyre, at lateſt [42] 560 years before Chriſt;

[37] See Parkhurſt in קד. Khadh.

[38] Mozel, vulg. Moozil, ſept. Turmatim, Chald.

[39] וְדָן may be *Vadan*, or *and Dan*.

[40] Hazarmaveth, Havilat, Ophir, and Sheba, are all on the ſouthern coaſt. Havilah is ſuppoſed to be Chaulonitis in Oman; ſo David is Daoud, in Arabic.

[41] See Parkhurſt in voce, and the catalogue in the preſent work, under kaſia.

[42] Coeval with Piſiſtratus, in Greece.

and

and this paſſage is therefore the moſt ancient record of the trade between India and Arabia, which can be called HISTORICAL; for though ſpices are mentioned frequently, that term is not deciſive, as all the gums and odours of Arabia are comprehended under that name. Cinnamon, kaſia, and calamus, alone prove an Indian origin; and notwithſtanding theſe are noticed by Moſes, David, and Solomon, the conveyance of them by caravans from the ſouthern coaſt of Arabia is no where ſpecified, till we arrive at this paſſage in Ezekiel.

V. 20. Dedan imported precious clothes for chariots. Dedan is introduced before (v. 15.): it may be the ſame country again, that is, Oman. But in this verſe there is nothing to expreſs whether theſe clothes are a manufacture, or an import from countries farther to the eaſt.

V. 21. Arabia, and the princes of Kedar, purchaſed the fabrics of Tyre, and brought in return, lambs, rams, and goats. By the princes of Kedar may be underſtood, the ſheiks of the tribes of the Sahara or Deſert: they lived in tents; and theſe tents were black, made of felt, perhaps, as they ſtill are. Kedar ſignifies black, and Bochart concludes from this, that they were Arabs burnt by the ſun; but that it refers to the tents is evident from Canticles, i. 5. I am *black*, but comely [43] as the tents of Kedar. Theſe, therefore, are the Arabs of Hedjaz; they have no fixed habitation, but wander throughout the Sahara [44]; and their only wealth, beſides what they obtain by robbery, conſiſts in their flocks and herds. The produce of theſe they brought to exchange for the manufactures of Tyre.

[43] See the Song of Maiſuna, wife of Moawiah, in Abilfeda, Reiſke, p. 116. which preſents a true picture of the manners of the Arabs of the Deſert.

[44] Whence afterwards they were called Saraceni.

V. 22.

V. 22. The merchants of Sheba and Raamah brought all kinds of the fineſt odours, precious ſtones and gold. Between Sheba (with ſhin) and Seba (with ſamech) there appears a diſtinction; for Sheba is a deſcendant of Shem, and Seba of Ham, Gen. x. Seba is, by ſome, taken excluſively for Sabêa, but both are in Arabia. The miſtake, however, of one for the other, is natural, as there is a Sheba [45] alſo, great grandſon of Ham. Mentioned, however, as Sheba is in this paſſage with Raamah, and connected as it is with Dedan (v. 20.), we may conclude that the great grandſon of Ham is meant, the ſon of Raamah, who is ſon of Cuſh. Cuſh, likewiſe, is much more properly attributed to Arabia than Ethiopia, though frequently rendered by Ethiopia in our Engliſh Bible. If this may be eſteemed a clue to guide us, we may place this Sheba, with Raamah [46] (Rhegma) and Dedan (Daden), towards the ſouth-eaſt angle of Arabia, that is, in Oman; where ſpices, drugs, odours, gold, and precious ſtones, might readily be conceived, partly to be the native produce of the province, and partly imported from India. Of precious ſtones there can be little doubt; and that gold ſhould be brought from India, is a circumſtance in conformity with the Periplûs; for if the merchant carried ſilver to the Indian market, he had a conſiderable profit by exchanging it for gold.

V. 23, 24. Haran, Canneh, Eden, with the merchants of Sheba, Aſhur, and Chilmad, traded in blue clothes, broidered work, or work of various colours—in cheſts of rich apparel, made with cedar and bound with cords.

[45] Compare Gen. x. 7. with the ſame chap. 28.

[46] Raamah is Rema in the Vulgate, and Ragma in the Sept.; both advancing a ſtep towards the Rhegma of Ptolemy, occaſioned by the *y* gnain in רַעְמָה Rha*y*ema.

That this expreſſes generally the trade with Meſopotamia and Aſſyria there can be little queſtion; but Sheba mentioned again with theſe places, cauſes great obſcurity. It may be too much to ſay, that theſe articles came up the Gulph of Perſia, from Sheba or Oman to Babylonia and Meſopotamia, and thence by caravans to Tyre; but the cheſts of cedar bound with cords do certainly ſeem to imply ſome great caution adopted for the preſervation of the clothes, which appear very precious, and highly ornamented. This caution ſeems more neceſſary for a conveyance over land, not only to prevent injury to the goods, but robbery likewiſe.

But Michaelis, as I learn from Archbp. Newcombe, goes counter to this whole ſuppoſition. With him, Haran is Haran-al-carin in Arabia; Canneh is the Kanè of Hadramaut; Eden is Aden in Sabêa, or Yemen; Sheba is a different place from Sheba in the verſe preceding, and Chilmad is left undetermined.

But to me it appears, that in the preceding verſes we have gone round the whole coaſt of Arabia, from weſt to eaſt—from Hedjaz to Sabêa, Hadramaut, and Oman; and that we are now brought up the Gulph of Perſia to the Euphrates and Tigris—to Babylonia, Meſopotamia, and Aſſyria; making thus a circle of that vaſt peninſula, and comprehending all the countries connected with Tyre to the eaſt. Againſt ſuch authority as Michaelis, I muſt not ſtand on my defence with my own forces, but call in auxiliaries, who have as high a claim to conſideration as Michaelis himſelf.

The ſingle name of Aſshur, enumerated with the other places in this paſſage, is ſufficient to convince us that they are not in Arabia, but Aſſyria; for Aſshur is the ſon of Shem (Gen. x. 21.), joined

with Elam [47], Elymais, or Perſia, and Aram, Aramêa, or Syria; and the invariable uſage of Aſshur for Aſſyria, does not admit of altering its application in this ſingle paſſage. Haran and Eden are mentioned in conjunction (2 Kings, xix. 12. Bochart), and Haran, written Hharan or Charan in the original, is Charræ near Edeſſa, celebrated for the defeat of Craſſus in later times, and more anciently for the reſidence of Abraham (Gen. xi. 31.), when he left Ur of the Chaldeans, near the Tigris, in his progreſs towards the land of Canaan. (Bochart, d'Anville.) Eden, Adana, and Aden, is a name found indeed in Arabia and in other places, and its ſignification might readily be the cauſe of this; for the Garden of Eden is the Garden of Delight, and various places, poſſeſſed of a deſirable ſituation, might aſſume this diſtinction; but joined with Haran, as it is here, and in the ſecond book of Kings, it muſt be in Aſſyria, and no where elſe; for in the latter paſſage it is put into the mouth of Rabſhekah, and Rabſhekah was an Aſſyrian.

Canneh likewiſe is read Calneh by Grotius, Houbigant, and Bochart, (mentioned Gen. x. 10. Iſaiah, x. 9. and Amos, vi. 2.) Michaelis himſelf acknowledges that the Chaldee interprets it of Niſibis in Meſopotamia, as others aſſume it for Cteſiphon. But without aſſigning it to a particular city, it is ſufficient for the preſent purpoſe that it is in Aſſyria. The proof of this is expreſs (Gen. x. 10.)—"Calneh, in the land of Shinar: out of that land went forth "Aſshur, and built Nineveh." If therefore Canneh be Calneh,

[47] Elymais is the original ſeat of the Perſians in the mountains of Loriſtan, before they extended themſelves in Perſis and Suſiana. Xenophon deſcribes them in the Cyropædia, as originally a nation of mountaineers. Elymais, or Elam, extended its name with their conqueſts. The ſame mountains were poſſeſſed by the Coſſæi in later times, and the Perſians are ſometimes called Kuſſii or Kiſſii by the Greeks.

this is concluſive; if it be not, this is the ſingle paſſage of ſcripture in which it is mentioned, and it muſt be determined by the context. In this predicament ſtands Chilmad likewiſe: it is noticed here only; and if we have aſcertained Aſhur, Charan, and Eden[48], to be in Meſopotamia, in that country muſt both Canneh and Chilmad be placed.

In regard to Sheba there ſtill remains a doubt; for though there are three Shebas or Sebas in Geneſis, x. we cannot aſſign any one of them ſpecifically to Aſſyria. I have offered a conjecture, that this Sheba may be in Arabia, on the Gulph of Perſia, but it is mere conjecture; and if it be not admitted, this alſo, though now undiſcoverable, muſt be aſſigned to Aſſyria with the others. But I apprehend that Sheba and Seba are in every other paſſage of the Scriptures applied to Arabia.

THIS Commentary, tedious as it muſt neceſſarily appear in ſome reſpects, will, I truſt, be acceptable to every reader of curioſity. I have little merit but that of collecting, under one point of view, what is to be ſearched for in the detached paſſages of other authors. This might have been done by any one that had equal induſtry, or an equal deſire of elucidating the commerce of the ancients; but it has not been done in a ſatisfactory manner by any one, as far as I am acquainted with the ſubject.

[48] Eden denotes a particular country or diſtrict. Gen. ii. 8. "God planted a garden "eaſtward in Eden." And Eden, by the mention of Tigris and Euphrates, v. 14. is univerſally aſſigned to Meſopotamia. See Bochart, Diſſertat. de Paradiſo terreſtri, p. 9. & Hardouin, Plin. tom. i.

In

In the profecution of this inquiry, I have felt much intereft in tracing the channels which commerce opened for itfelf, after the Tyrians had no longer acceſs to the Red Sea, or the means of making the voyage to Ophir in their own ſhips; and I think it appears evident that they had a communication by land with all the three ſides of Arabia, as well as with the countries farther eaſt, through the intervention of Arabia, of Aſſyria, and Babylonia. That the commodities of the Eaſt will bear a long and expenſive land-carriage, we may be aſſured by the caravans which traverſed the whole continent of Aſia, from China to the Mediterranean, in former ages; and thoſe which paſs between the ſame empire and Ruſſia at the preſent day. That the Tyrians ſhould be employed in the ſame concern, is natural, from our knowledge of their commercial ſpirit, and from the profits of their monopoly in regard to Europe. Whether the knowledge of theſe gains, or the thirſt of conqueſt, induced Nebuchadnezzar to deſtroy this city, may be queſtioned; but I have already ſhewn that he had improved the navigation of the Tigris, and eſtabliſhed a port on the Gulph of Perſia. In this there could be no object but a communication with the Eaſt; and when the Babylonian empire ſunk under the power of Perſia, Tyre roſe again out of its ruins, becauſe the Perſians were neither navigators or merchants, and becauſe the fleets of Tyre were eſſential to the proſecution of the conqueſts of the Perſians towards the Weſt.

The deſtruction of Tyre is foretold by Iſaiah (xxiii.) and Jeremiah (xxv. 22. xlvii. 4.), as well as by Ezekiel, who employs three chapters upon the ſubject, and enters far more minutely into particulars. In the twenty-eighth chapter he declares, the pride of this devoted

devoted city, whoſe ſovereign boaſted, " I am a God ;" " I ſit in " the ſeat of God, in the midſt of the ſeas ;" " I am God" (v. 9.); and whoſe luxury made every precious ſtone his covering—the ſardius [49], topaz [50], ruby, diamond, beryl, onyx, jaſper, ſapphire, emerald, and carbuncle, ſet in gold (v. 13.). The various rendering of theſe in different tranſlations, will prove indeed the little dependance there may be on our knowledge of the Hebrew terms; but will ſtill leave an impreſſion, that they are imported from countries farther eaſtward, whence moſt of the precious ſtones ſtill come, and will prove not only the value, but the direction of the commerce.

With theſe obſervations I cloſe the review of this extraordinary prophecy relating to Tyre and its commerce; and if the Periplûs affords us the means of tracing the countries it deſcribes, by the ſpecification of their native produce; equally appropriate, or more abundantly ſo, are the articles contained in the enumeration of the Prophet; the latter part of which coincides moſt eſſentially with the detail in the Periplûs, and eſtabliſhes the conſiſtency and veracity of both.

[49] See Lamy, Introduct à l'Ecriture, c. iv. p. 425. who has all that can well be ſaid on the ſubject; but the Hebrew names of jewels are chiefly derived from verbs expreſſing radiance, and are therefore indeterminate; but *adem* is red, and may be the ruby; *jaſhphè* has the ſound of jaſper, and *ſapphir* is ſelf evident I wiſh יַהֲלֹם *iahalom*, which Parkhurſt derives from *halham*, to ſtrike, could be aſcertained for the diamond; and might we not ſearch the root הָל *hal*, to move briſkly, to irradiate, ſhine, or gliſten. Halil, he adds, denotes the Morning Star, from its vivid ſplendour.

[50] Tarſhiſh is one of the jewels in the breaſt-plate of the high-prieſt, which (compared with John, Rev.) Lamy concludes to be the chryſolite or topaz; but he adds, that ſome ſuppoſe it the aigue marine, or ſtone that is the colour of ſea-water, and that in this ſenſe Tarſhiſh the jewel is applied to Tarſhiſh the ſea, p. 431. It is rendered chryſolite or topaz in this paſſage of Ezekiel.

To

To the public I now commit the result of my inquiries. In return for the labour of many years, the only reward I am anxious to obtain is, the approbation of the learned and ingenuous: if I fail in this object of my ambition, I must console myself with the reflection, that my own happiness has been encreased by attention to a favourite pursuit, by the acquisition of knowledge, and by the gratification of a curiosity almost coetaneous with my existence.

SEQUEL TO THE

DISSERTATION III.

ON THE NAVIGATION AND COMPASS OF THE CHINESE,

BY

THE RIGHT HON. THE EARL OF MACARTNEY.

N. B. At p. 257, this Diſſertation is mentioned improperly as No. 1.

IN my Journal of 11th Auguſt 1793, I gave ſome account of the junkas and ſhipping employed by the Chineſe, and expreſſed my aſtoniſhment at their obſtinacy in not imitating the ingenuity and dexterity of Europeans, in the built and manœuvre of their veſſels, after having had ſuch ſtriking examples before their eyes for theſe 250 years paſt: but I muſt now in a good meaſure retract my cenſure upon this point; as, from what I have ſince obſerved in the courſe of my ſeveral voyages on the rivers and canals of China, I confeſs that I believe the yachts, and other craft uſually employed upon them for the conveyance of paſſengers and merchandize, and the Chineſe boatmen's manner of conducting and managing them, are perfectly well calculated for the purpoſes intended, and probably ſuperior to any other that we, in our vanity, might adviſe them to adopt.

With regard to veſſels of a different kind for more diſtant voyages, to Batavia, Manilla, Japan, or Cochin-china, I am informed that the Chineſe of Canton, who have had frequent opportunities of ſeeing our ſhips there, are by no means inſenſible of the advantages

they

they poſſeſs over their own; and that a principal merchant there, ſome time ſince, had ordered a large veſſel to be conſtructed according to an Engliſh model; but the Hou-pou, being apprized of it, not only forced him to relinquiſh his project, but made him pay a conſiderable fine for his delinquency, in preſuming to depart from the ancient eſtabliſhed modes of the empire, which, according to his notions, muſt be wiſer and better than thoſe of the barbarous nations, which come from Europe to trade here. It is indeed, as I have before remarked, the prevailing ſyſtem of the Tartar government, to impreſs the people with an idea of their own ſufficiency, and to undervalue in their eyes, as much as poſſible, the ſuperior invention of foreign nations; but their vigilance in this reſpect, and the pains they take for the purpoſe. evidently betray the conſcious fears and jealouſy they entertain of their ſubjects' taſte for novelty, and their ſagacity in diſcovering, and wiſhing to adopt, the various articles of European ingenuity for uſe, convenience, and luxury, in preference to their own clumſy, old-faſhioned contrivances [1]. The government alſo probably apprehended danger from our teaching their ſubjects things of which they are now ignorant, but which they would be willing enough to learn. No precaution, however, can ſtand before neceſſity; whatever they want from us they muſt have, and every day they will want more, and elude all means of prevention in order to procure them. Cotton, opium, watches, and broad cloth, and tin, they cannot do without; and I have little doubt, that in a ſhort time we ſhall have almoſt a monopoly of thoſe ſupplies to them.

[1] I am aſſured that ſeveral ſmart young Chineſe of Canton are in the habit of wearing breeches and ſtockings, à l'Angloiſe, in their own houſes, and when they come abroad, cover them over with their uſual Chineſe accoutrements.

But to return from this digreſſion to the ſubject of Chineſe Navigation.—It is a very ſingular circumſtance, that though the Chineſe appear to be ſo ignorant of that art, and have neither charts of their coaſts or ſeas to direct them, nor foreſtaff, quadrant, or other inſtrument for taking the ſun's altitude, yet they have for many years paſt been acquainted with the uſe of the Mariner's Compaſs[2]; they even pretend that it was known to them before the time of Confucius. Be that as it may, the beſt writers agree that it was not known in Europe till the thirteenth century, nor brought into general uſe till the latter end of the fifteenth; but whether communicated by Marco Polo on his return from China, or by ſome other adventurer, remains undecided. The plan of it, according to its diviſion into thirty-two points, ſeems to indicate it rather an intended European improvement upon ſomething already diſcovered, than to be an original invention. The Chineſe Compaſs being divided only into twenty-four points, it was eaſy to add eight more; and yet, even with this improvement, the European Compaſs in one reſpect labours under one diſadvantage when compared with the Chineſe one; for in the latter the calculations are much eaſier, each point anſwering to fifteen degrees, without odd minutes.

Whoever it was that originally introduced the Mariner's Compaſs, as now uſed, of thirty-two points, could not have been extenſively verſed in ſcience; for, long before the diſcovery of the magnetic needle, philoſophers of all nations had agreed to divide the circle into 360 equal parts or degrees, a degree into 60 minutes, a minute into 60 ſeconds, &c. &c. The reaſon, I preſume, of the general

[2] Ting-nan-chin, or the South-deciding Needle.

adoption

adoption and continuance of thoſe numbers, is the convenience of their being diviſible into integral parts by ſo many different numbers. The points of our mariner's compaſs, however, happen not to be among theſe numbers, for 360 divided by 32, give 11¼ degrees, ſo that, except the four cardinal points and their four biſecting points, all the others converted into degrees, will be involved with fractions, a circumſtance of great inconvenience, although thought immaterial by ſeamen, who have tables for every minute of a degree ready calculated to their hands. Now, it is ſubmitted, whether the Chineſe, without any pretenſions to ſcience, have not fallen upon a more convenient diviſion of the card of their compaſs, than the Europeans have adopted, with all their pretenſions to ſcience. It is quartered by the four cardinal points, in the ſame manner as ours, and each of theſe is ſubdivided into ſix points, making 24 points in the whole card, ſo that every point contains 15 degrees, or the fifteenth part of 360.

After all, perhaps a diviſion of the card into 36 points would be found more advantageous than any other, for then every point would be equal to ten degrees; half a point equal to five degrees, &c. &c. and ſo on.

APPEN-

AFRICA

From the Planisphere *of* Fra MAURO *1459*
preserved in the library *of* San Michael di Murano *at* Venice
containing *the report of a* Ship *from* India *having* passed *the*
extreme point South *2000 miles towards the* West & SouthWest *in 1420*

N. B

Diaz *passed the* Cape *of* Good Hope *in 1486*
Gama *in 1497 who first reached* India.

The dotted lines of Rivers are green in the original, the lines not dotted are blue. the green are perhaps the conjectures of the Author.

Names *introduced but not mentioned by the Author have an Asterisk* *

The original *contains a multiplicity of names not inserted in this copy & not necessary for understanding the Circumnavigation*

Published according to Act of Parliament by W Vincent 1st June 1806
Walker sculp

MEMOIR

OF THE

MAP OF FRA MAURO,

IN THE

MONASTERY OF ST. MICHAEL DI MURANO, AT VENICE,

So far as it relates to the Circumnavigation of Africa.

[This Memoir may be conſidered as a fourth Diſſertation to be added to the Sequel of the Periplûs, Part the Second, and is numbered accordingly from Page 560 of that Work.]

THE deſire of obtaining a faithful copy of this celebrated Planiſphere originated from a variety of cauſes, among which the principal were theſe:—

I. Firſt, That an opportunity would be afforded of examining whether this were the map deſcribed by Ramuſio,[1] and by him conſidered as appropriate to the Travels of Marco Polo.

II. Secondly, To eſtabliſh the authenticity of the map itſelf, and its exiſtence antecedent to the voyages of Diaz and Gama.

[1] In the advertiſement prefixed to the Travels of Marco Polo, p. 17.

III. And

III. And thirdly, To aſcertain the extent of the information it contained relative to the termination of Africa in the ſouth.

But if the attainment of the object was deſirable, the precarious ſtate of Venice itſelf, and the probable injury the map might have ſuffered during a lapſe of three hundred and fifty years, urged the neceſſity of diſpatch as indiſpenſable.

Founded on theſe motives, an application was made in the year 1804 to Lord Hobart, then Secretary of State for the foreign department, who, with the liberality congenial to his diſpoſition, and the alacrity of a protector of the ſciences, directed the neceſſary enquiries to be made without delay.

Mr. Watſon, who had reſided at Venice forty years; and who was the Engliſh Conſul in that city, was conſulted. That gentleman was well acquainted with the map, and had frequently viſited it as an object of curioſity; he offered the ſervices of his nephew, Mr. Frazer, a miniature painter by profeſſion, to undertake the work, and ſtated that the expence of a fac ſimile copy could not be leſs than an hundred and fifty pounds.[a]

No ſooner was this intelligence received, than a ſubſcription was opened for the accompliſhment of the deſign, and in a few days filled, by the contributions of the Eaſt India Company, Earl Spencer, the Earl of Macartney, Lord Hobart (now Earl of Buckinghamſhire), the Biſhop of Durham, Mr. Strahan, Printer to His Majeſty, and the Editor of the Periplûs.

The artiſt was directed to proceed immediately, and in nine months completed his copy of the Planiſphere, which, with all its

[a] The expence of conveyance, fitting up, and further remuneration of the artiſt, amounts to more than 200*l*.

errors,

errors, is a moſt beautiful ſpecimen of geography, and exhibits at one view all that was known on this ſubject in the fifteenth century.

The copy, when finiſhed, was tranſmitted to the Engliſh Ambaſſador at Vienna, in whoſe hotel it remained for many months, being too bulky for an ordinary conveyance, and too long forgotten from the preſſure of buſineſs far more important; but at Vienna it was found, after eſcaping the ravages of the French army, by the artiſt who had executed it, and who, by a coincidence of ſingular circumſtances, had the good fortune to bring it himſelf to the hands of the ſubſcribers.

The connexion of this work with the plan of the editor, ariſes naturally from the conſtruction of his Commentaries on the Voyage of Nearchus and the Periplûs of the Erythrean Sea; in theſe two works he undertook not only to elucidate the narrative, but to embrace all the leading cauſes which contributed to the better information of the moderns;—in ſhort, to trace the PROGRESS OF DISCOVERY from the commencement of it by Nearchus, to its completion by the voyage of Gama.

After a brief enumeration of theſe particulars we may proceed to conſider:

I. Firſt, whether this was the map noticed by Ramuſio, and ſuppoſed by him to be drawn up for the elucidation of the Travels of Marco Polo.

Upon the commencement of this enquiry it is neceſſary to have it underſtood, that the Planiſphere of Fra Mauro was never intended by the author for the purpoſe of tracing the route of his countryman: it contains indeed many particulars deduced from his

Memoir, but without any acknowledgement of the obligation [3]. It is a general map of the known world, formed upon the Arabian principle, and its outline is represented by the ſketch I have given from Al Edriſſi, in the Appendix to the firſt part of the Periplûs; that is, a circle ſurrounded by a circumbient ocean; or if conſidered as a hemiſphere, it is the egg [4] floating in a baſon of water.

I ventured to predict this to ſome of my ſubſcribers before its arrival, and to ſhew that conſequently, if the three Continents were encompaſſed by this mare tenebroſum of the Arabs, Africa muſt have a termination on the ſouth, as well as Lapland on the north.

That the Atlantic [5] communicated with the Indian ocean was a perſuaſion univerſally admitted from the earlieſt ages by all the geographers, except Ptolemy; he indeed carried round his Southern Continent from the extremity of Africa till it joined the empire of China: the Arabians, who followed Ptolemy, did not copy him in this reſpect, but the termination of Africa in Al Edriſſi is protracted eaſtward till it ends under the ſame meridian as China; the map of Marin Sanuto [6] in 1321, which is likewiſe from an Arabian original, has the ſame inclination, but not to the ſame exceſs; and the planiſphere of Fra Mauro has a ſimilar turn to the eaſt, but confined

[3] The Memoir of Father Mirtarelli, Abbot of St. Michael di Murato, in 1779, aſſerts this; and upon a ſcrupulous examination of the map, I find no reaſon to contradict his aſſertion.

[4] It is not by this intended to aſſert, that Fra Mauro deſigned it for this half egg of the Arabs; he knew well that the earth was a ſphere.

[5] It is on this foundation that the Phênician voyage is recorded by Heródotus, and the teſtimony of Ariſtotle is in conformity. Ἡ μὲν Ἐρυθρὰ φάινεται κατὰ μικρὸν (ſenſim) κοινωνοῦσα πρὸς τὴν ἔξω σῆλαν θάλασσαν. Ariſt. ii. Meteor. i cited by Weſſeling ad Diodor. p. 23. Scylax, Pliny, and Strabo bear the ſame teſtimony.

[6] The account of this very curious map will be found in the Periplûs, part ii. p. 323. I have cauſed a ſketch of it to be engraved and inſerted here.

within

TABULA ex [illegible]

Desum[illegible]

Quæ Conservatur

Inter Gesta D[illegible]

TOM. II. *p.* 261

ARABUM [illegible]

Auct[illegible]

ANNO

Albania

Montes

Mare

Ferræ

Porta

Caspium

Scythia

Caspium jugo Montes

Sina Mons

Georgia

Tigris

Regio non habitabilis propter ardorem

Rubeni Schismatici

Polonia

Hungaria

Ister

Germania

LIVONIA

Scandia

Norwegia

Dacia

Scotia

BRITANNIA

HIBERNIA

GALLIA

HISPANIA

Gades

MARE MEDITERRANEUM

Italia

ASIA

Antiochia

Jerusalem

Babylon

Euphrates

SINUS PERSICUS

ARABIA Mediterranea

Mare Rubrum

Æthiopia inferior

India

Multitudo Tartarorum

India Magna

Elephantes nascuntur

Mauritania

Numidia

Cyrene

Garamantia

NUBIA

Nilus

Æthiopia Barb.

Regio VII Montium

ÆGYPTUS

Rebelles terræ Nigrorum

Regio non habitabilis propter calorem

Arabes

Zanguebar

Insulæ Diversæ

MARE TENEBROSUM

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within ſtill narrower bounds. The additional information which Fra Mauro gives, will be conſidered under the third head.

But let us now advert to the report of Ramuſio relative to the map in the church of St. Michael di Murano, given at p. 201, of the Periplûs, part the firſt; where it will be ſeen, that it *does not* correſpond with the planiſphere now under conſideration in regard to ſeveral particulars; for it mentions, that the longitudes and latitudes were marked on it,—that it was adapted to, or meant to repreſent, the travels of Marco Polo,—that it was reformed from a more ancient map brought home by Marco Polo himſelf.—On the other hand, it *does* correſpond, in noticing that it was drawn up by a lay brother [7],—that it hung [8] in the church,—that it was viſited as a curious work by all ſtrangers who came to Venice; and finally, that the characteriſtic feature of it was, that it exhibited a ſouthern termination of Africa, and the junction of the Atlantic with the Indian ocean.

Now, comparing this oppoſition of circumſtances, it ſeems as if we muſt conclude, that unleſs there were two planiſpheres in the church,—both drawn up by a lay brother,—both viſited by ſtrangers,—both containing a termination of Africa;—this muſt be the map that Ramuſio has recorded, and that the erroneous ſide of the account muſt be attributed to the neglect of the reporter. This is a harſh judgment, for Ramuſio is the moſt faithful, correct, and accurate of collectors; he lived at Venice himſelf, and as he could not

[7] Converſo, in the Italian, means a Fra, or Friar profeſſed, but not ordained; the ordained Prieſts are Padres, or Fathers, in the order of Calmes.

[8] By a teſtimonial on the map itſelf, it appears that it was removed from the church to the hall, and from the hall to the library, in 1655, when the library was repaired and beautified.

want

want opportunity of aſcertaining the fact, neither can we well attribute to him the want of curioſity or inveſtigation. But it is very extraordinary that Ramuſio[9], who lived within fifty years of Fra Mauro, ſhould never have mentioned him by name, but only noticed the author as a lay brother of the order of Câlmes; notwithſtanding this, Mauro was ſo celebrated as a coſmographer in his day as to have a medal ſtruck in honour of him; and added to this, the planiſphere he has left us, is conſecrated to the honour of the Republic. This neglect cannot be imputed to jealouſy, for his rival was no more; neither is it more remarkable than that Fra Mauro, who has copied ſo amply from Marco Polo, ſhould never mention his name. Conſidering, however, the enquiry into theſe particulars as unneceſſary, I cannot ſuppreſs my own opinion, which is, that this was the map intended by Ramuſio, but that his information is not correct. And in addition to my own teſtimony, I may ſubjoin, that in a memoir of this map, drawn up by Father Jo. Benet Mirtarelli, Abbot of St. Michael di Murano in 1779, and communicated to Lord Hobart by Mr. Stuart, it is throughout admitted that this planiſphere, and no other, is the one deſignated by Ramuſio, and that his account of it is erroneous.

It is much to be regretted that we have no genuine map that can be traced to Marco Polo himſelf,—for that which was in the Doge's palace, (a copy of which I received from Lord Macartney,) is by internal evidence later than 1550; it is not formed on Arabian principles, it has the peninſula of India, and that of Malacca, in conformity to the Portugueſe diſcoveries; it has the Eaſtern Iſlands and the Moluccas almoſt correct; and the only trace of its deriva-

[9] He died in 1557, at 72 years of age.

tion

tion from an ancient ſource, or an age prior to Gama, is, that the firſt country eaſt of China is Spain; proving, in this one inſtance at leaſt, that it was copied from ſome authority previous to the diſcovery of America.

II. Under the ſecond head we are to enquire, whether the work we have is genuine? whether it were really executed by Fra Mauro? and whether it exiſted previous to the voyage of Gama?

The proof of this is very ſhort, for the age of Fra Mauro is perfectly aſcertained in the hiſtory of the monaſtery; his excellence as a coſmographer is fully eſtabliſhed by the medal ſtruck in honour of him; the inſcription on which is,—Frater Maurus Monachus Camaldunenſis Sancti Michaelis de Muriano Coſmographus incomparabilis: the date on the planiſphere is 1459, and the internal evidence in the work itſelf is in complete harmony with the date. Added to this, we know by the teſtimony of the Portugueſe, that Alfonſo V. or Prince Henry, who died in 1663, received a copy of this map from Venice, and depoſited it in the monaſtery of Alcobaça, where it is ſtill preſerved.[10]

It is in fact calculated for the furtherance of Prince Henry's deſigns; for it aſſerts that an Indian ſhip had been carried 2000 miles weſt beyond the extreme point of Africa, and that the Portugueſe navigators had ſailed 2000 miles ſouth, from the Straits of Gibraltar; by this implying, that the junction of theſe two lines could not be a labour of very great difficulty, and that the proſecution of the diſcovery muſt ſoon lead to the attainment of the object propoſed. The ſums likewiſe paid for the copy by Alfonſo V.[11] king of

[10] See Periplûs, Part i. p. 199. where this is ſtated incorrectly.

[11] Alfonſo V. began to reign in 1438, and lived till 1480. The whole of his reign therefore is prior to Diaz and Gama, and includes the age of Fra Mauro.

Portugal, and the account of expenditure is ſtill preſerved in the monaſtery of St. Michael; the whole memoir of Abbot Mirtarelli, confirms this, and puts the queſtion out of doubt.

III. This brings us to the third head, in which we are to ſhew what the Planiſphere actually contains relative to the termination of Africa on the ſouth.

This is in reality the prime curioſity and great merit of the work, for its defects in other reſpects are in perfect harmony with the ignorance of the age; nay, there are ſome errors which, if the author had followed Ptolemy, as he profeſſes to do, he could not have committed. His failure in regard to India is inexcuſable, for though Ptolemy might have miſled him, as he has, in regard to curtailing the peninſula of India, and reducing both coaſts nearly to one parallel of latitude, ſtill Ptolemy has an Indus and a Ganges not ſo much diſtorted as to produce the enormous aberration of Fra Mauro; for he places Dehly on a ſtream which comes towards the coaſt of Malabar; he then carries an Indus into the bay of Bengal; another river running down to Ava, Pegu, and Siam; and to the eaſtward of this a Ganges. This is ſo wild an error, that it is not worth ſeeking for its origin. There are a variety of miſconceptions in other parts, though none ſo extravagant as this. But not to inſiſt on theſe, let us now advert to the termination of Africa, the principal object in view, when it was propoſed to obtain a copy of this work, and the leading cauſe for introducing it to the notice of the reader.

Longitude and latitude, though the author frequently mentions, he does not apply; he fixes the centre of the *habitable* world near Bagdat, and would willingly have fixed it at Jeruſalem if he could have found the means.

Aſia

Aſia and Europe he defines rationally, and Africa, ſo far as regards its coaſt on the Mediterranean. He traces the Nile up into Abyſſinia, of which he has two heads, one towards the eaſt, from the Arabian accounts, where ſeveral ſtreams unite into three lakes;[12] and another weſtern one, which *he* calls Ab-avi, as well as Bruce, which winds round, and after paſſing through a lake reſembling Dembea, returns again to the north like that river; but both theſe ſources partake leſs of the errors of Ptolemy and the Arabs than might be expected; they are not carried quite ſo far ſouth,[13] and on this head it is highly probable that he received his information from the miſſionaries and merchants who had been in Egypt, and perhaps farther inland.[14] This he profeſſes to be the ſource of his intelligence, and it appears rational, from a view of his work; but then, as he knew nothing of Africa more remote than this region, he extends Abyſſinia down to the ſouth, till it is almoſt in contact with what *we* ſhould call the country of the Hottentots.[15]

On the eaſtern coaſt, however, of this continent, he has a different ſyſtem; for having found, as we may ſuppoſe, in Marco

[12] This is the preciſe fact alſo in the Arabian map of Al Edriſſi, and Fra Mauro copies him likewiſe in making the ſtream paſs through a mountain, with the cataracts, &c. &c. This ſource, by its relative ſituation, ought to be the Tacazzè, but it is remarkable that the Mareb river of Bruce, which joins the Tacazzè, actually does ſink under ground and riſe again.

[13] The ſources of the Nile, at leaſt Bruce's Nile, are in latitude 12° North, thoſe of Ptolemy 12° South, and thoſe of Al Edriſſi ſtill much farther South.

[14] Whence the author derived his knowledge of Abyſſinia is extremely dubious. We know of no Miſſionaries who penetrated into that country previous to the Portugueſe in 1520, ſixty years later than the date of the Planiſphere.

[15] It is very remarkable, that his termination of Abyſſinia on the ſouth is formed by a river named Galla, which proves that the Gallas, who have been the invaders and deſolaters of Abyſſinia for theſe 300 years, even in that age had the appellation, and that their country was placed to the ſouth. In fact, the intelligence of the author, in ſome particulars, is as ſingular, as his errors are in others.

Polo, that there was a great iſland called Zanguebar,[16] 2000 miles in circumference, he actually carries an arm of the ſea between this iſland and the continent, in an oblique direction, commencing at Magadoxo, and iſſuing at the point where we ſhould fix the Cape of Good Hope. This iſland (perhaps from a corruption of the Hindoo, *Dweep**) he calls *Diab* three times over, and the termination of it on the ſouth he ſtyles Cape Diab, making it the extreme point of Africa; and adding, in *one place*, that nothing ever paſſed it, in *another*, that an Indian ſhip, in the year 1420, had been carried 2000 miles to the weſtward of it in the ſpace of 40 days, and was 70 in returning.

That the iſland Diab was in one ſenſe the Zanguebar of Marco Polo, is evident, for on the eaſtern coaſt of it we have Magadoxo, Zanguebar, and Sofala, in due order;[17] we have likewiſe, inland, a province abounding in gold, which we may ſuppoſe to correſpond with Monomotapa. But the laſt place mentioned on the eaſt is Macdeſin,[18] approaching ſo nearly to the Madaſtar or Magaſtar of Marco Polo, as to induce a ſuſpicion that Diab may have been confounded with Madagaſcar.

It is not meant to aſſert, however, that this ſuſpicion is well founded; for Fra Mauro has an iſland Mahal, where he ſays the

[16] Zanguebar is in reality a ſmall iſland on the coaſt, in lat. 6. ſouth, and the continent oppoſite to it takes its name from the iſland: it is this continent that M. Polo has transformed into an iſland again, 2000 miles in circumference, perhaps from Arabian authority, for the Arabs apply the term to many regions which are not iſlands.

* For this curious and rational conjecture I am indebted to Mr. Haſtings.

[17] Quiloa, written Chelua, Brava, and Mombaza, are inſerted, but not in due order, they are all below Sofala, and Sofala is apparently repeated twice.

[18] I am not without doubt reſpecting this Maedeſin. I have ſometimes ſuſpected it may have been intended for Moſambique.

pirates uſed to rendezvous, and where there was plenty of amber; this laſt particular Marco Polo attributes to his Madaſtar,[19] but the Mahal of F. Mauro is a ſmall iſland, and the Madaſtar of M. Polo is 3000 miles in circumference, in which again it agrees better with Diab. At Diab, likewiſe, Fra Mauro mentions the fable of the Ruck, which M. Polo notices as exiſting in Madaſtar, and this increaſes the probability in favour of the conjecture that Madagaſcar is confounded with the continent. But, upon the whole, the narrative of M. Polo is far more conſiſtent with truth than Fra Mauro's Planiſphere; and his account of the violent current in the Moſambique channel is a moſt illuſtrious geographical verity, far ſurpaſſing the information of the age he lived in.

Let us now proceed to the ſpecific pre-eminence of the Planiſphere, in which it ſurpaſſes all the intelligence received from prior geographers. It has been obſerved already, that this work was compoſed with a view to encourage the Portugueſe in the proſecution of their voyages to the ſouth; two paſſages, which may be adduced from the rubrick in the map,[20] will ſet this in the cleareſt light. The firſt is inſerted at Cape Diab, the termination of Africa on the ſouth, beyond which no navigators paſſed, and where was the commencement of the Mare tenebroſum; "but here," ſays the author, "about "the year 1420, an Indian veſſel or junk, which was on her "paſſage acroſs the Indian ocean to the iſlands of men and

[19] It is perhaps the beſt reaſon for thinking that Mahal is Madaſtar; for the northern cape of Madagaſcar is called at this day Cape Ambra.

[20] The Planiſphere is ſo ample as to admit of much writing throughout, which may be conſidered as the Memoir to the Map. The letters are uſually in red ink, and properly Rubrick; but the black bear the ſame title. I have not yet found a reaſon for the preference of the one or the other; perhaps variety or caprice was ſufficient reaſon with the author.

The copyiſt ſays the hand is the ſame throughout.

" women,[21]" was caught by a ſtorm, and carried 2000 miles beyond " Cape Diab to the weſt and ſouth-weſt; and when the ſtreſs of " weather ſubſided, was ſeventy days in returning to the Cape:" he then mentions that the vaſt bird called the Ruck was found here, which is ſo ſtrong as to carry up an elephant in its talons,[22] and then to daſh it to the ground, and feed upon its fleſh.

This therefore the author conſiders as full proof that Africa was circumnavigable on the ſouth. The ſecond Rubrick we are to cite is inſerted on the weſtern coaſt of Africa, and contains the following particulars :—

" Many have thought, and many have written, that the ſea does " not encompaſs our habitable and temperate zone[23] on the ſouth; " but there is much evidence to ſupport a contrary opinion, and " particularly that of the Portugueſe, whom the king of Portugal " has ſent on board his caravels to verify the fact by ocular inſpec- " tion. Theſe navigators report, that they have been round the " continent more than 2000 miles to the ſouth-weſt beyond the " Straits of Gibraltar . . . . that every where they found the coaſt " not dangerous, with the ſoundings good, and convenient for na- " vigation, and with little danger from ſtorms. Of theſe regions " they have framed new charts, and given new names to the rivers, " bays, capes, and ports. I have many of theſe drafts in my poſ- " ſeſſion, but if any one ſhould queſtion the evidence of thoſe who " have actually viſited theſe coaſts, much leſs would he credit thoſe

[21] Theſe iſlands are called Nebila and Magla; the fable is in Marco Polo, and probably Arabian, that the men paſſed to the women for three months in the year, and then returned to their own iſland with the boys leaving the girls behind. Nebila appears in Sanuto's map.

[22] The inſtance is an elephant likewiſe in Marco Polo.

[23] He means the habitable *world*.

" who

" who are not navigators, but writers only on the ſubject, and re-
" ceive their information from others.

" I have likewiſe talked with a perſon worthy of credit, who af-
" firmed that he had been carried [24] in an Indian ſhip by ſtreſs of
" weather, in a courſe out of the Indian ocean, for forty days, be-
" yond the Cape of Soffala and the Green Iſlands, towards the weſt
" and ſouth-weſt,[25] and that in the opinion of the aſtronomer on
" board,[26] (ſuch as all the Indian ſhips carry,) they had been hurried
" away for 2000 miles. And this report is at leaſt more credible
" than the aſſertion of others, who mention a progreſs of 4000
" miles [in the ſame direction.] . . . . In ſhort, without all doubt
" we may affirm, that the ſea encompaſſing this ſouthern and ſouth-
" eaſtern part of the world is navigable; and that the Indian ſea is
" ocean, and not a lake (like the Caſpian); for this is conſtantly aſ-
" ſerted by all thoſe who navigate this ſea, or inhabit theſe iſlands."

By comparing theſe two paſſages together, the natural concluſion is, that the deſign of the author was to encourage the Portugueſe in the proſecution of their voyages to the ſouth, and to aſſure them of the certainty of ſucceſs in getting round the continent, by aſſerting that this Indian ſhip had actually penetrated into the Atlantic. But ſtill it is to be obſerved, that the two accounts are at variance: the firſt ſays, the paſſage was made round Cape Diab, at the termination of Africa; the ſecond aſſerts that it was beyond Cape Sofala and Praſum,[27] which is fifteen degrees north of that termination; and a

[24] Scorzo.

[25] Perhaps the Praſum of Ptolemy and the Greeks.

[26] In another Rubrick he writes expreſsly, that the Indian ſhips had no compaſs, but were directed by an aſtronomer on board, who was continually making obſervations. In this he ſeems to follow Nicola di Conti.

[27] Iſole Verde.

courſe

courſe winding round the continent from Sofala to Cape Agulhas[28] could not be leſs than two and twenty degrees, that is, upwards of thirteen hundred geographical, or fifteen hundred Britiſh miles; if, therefore, there is no exaggeration in the account of the aſtronomer, this veſſel might have paſſed five hundred miles beyond Cape Agulhas to the weſt. One reaſon more eſpecially which may perſuade us that the 2000 miles are rather to be reckoned from Sofala than Diab is, that a ſouth and ſouth-weſterly courſe would actually carry them towards Cape Agulhas, whereas from Diab, ſuch a courſe would have carried them 2000 miles into the open ſea, leaving the continent behind them in the north-eaſt. Another reaſon for reckoning from Sofala is, that it was the laſt place on the eaſtern coaſt to which the Indian ſhips traded, and if a veſſel, making this port, happened to overſhoot it, ſhe might eaſily be hurried further ſouth by the violent current in the Moſambique channel, which ſets all round the coaſt to Cape Agulhas; and in the force of which, if a veſſel was once caught, ſhe might well be ſeventy days in returning on the ſame track which ſhe had before paſſed in forty, when going to the ſouth.

Theſe reaſons induce me to think that the ſecond Rubrick is the more correct, and that the 2000 miles are to be reckoned from Sofala. I have ſtated the whole fact as it may be viewed in either light, and leave the determination to the judgment of the reader. In either caſe, if there is no exaggeration, the extreme point of Africa was really paſſed, and the diſcovery aſcertained.

Whether the courſe of this Indian veſſel be true or falſe does not enter into the conſideration; the fact is poſſible, and even probable;

[28] Cape Agulhas is the extreme point of Africa, almoſt a degree ſouth of the Cape of Good Hope.

and

and if ſuch a report was brought to Fra Mauro, the inſertion of it in his map was not only allowable, but conſiſtent with the deſign of his work compoſed for the King of Portugal and the encouragement of his ſubjects. It is reaſonable to ſuppoſe that the author did not foreſee that the conſequence of the diſcovery would be a fatal ſtroke to the commerce of his country, otherwiſe we may be aſſured, that neither his own patriotiſm, or the intereſts of Venice, would have ſuffered ſuch a communication to have been tranſmitted.

Let us next obſerve, that Fra Mauro aſſerts he had his information from a perſon of credit who actually ſailed aboard an Indian ſhip. In this there is no inconſiſtency, for the merchants of Venice, and other Italians who traded to Alexandria, did in ſeveral inſtances paſs down the Red Sea, and penetrate into India. Nicola di Conti,[29] in 1420, ſailed in an Indian ſhip, and gives much the ſame account of Indian navigation; the date of 1420 is a remarkable coincidence, but di Conti ſays nothing in his own memoir of a ſhip being carried round the termination of Africa, otherwiſe I ſhould have ſuppoſed that this curious traveller had actually been the origin of Fra Mauro's report: at preſent it only goes to prove that ſeveral Italians did paſs into the Indian ocean, and did ſail on board the ſhips of the natives, from ſome one of whom the author might have received his information.

Another obſervation occurs upon reading theſe two accounts, from the mention of the 2000 miles that this Indian ſhip had paſſed, and

[29] Nicola di Conti was a Venetian: he went by way of Damaſcus to Bagdat, Baſra, and Ormus: he was long abſent, and after his return received abſolution from the Pope in 1444. I may place his going out to India too early, but the date of his return in 1444 comes ſo near the time of Fra Mauro, whoſe map was completed in 1459, that he might eaſily have conſulted him. See Ramuſio, tom. i. p. 338.

the

the 2000 miles that the Portugueſe navigators had diſcovered from the Straits of Gibraltar, it is manifeſt that Fra Mauro thought that the intermediate line which would join the two courſes was neither extenſive or attended with great difficulty. But let us advert to the date of the Planiſphere 1459, from which we may aſcertain the extent of the progreſs of the Portugueſe; for it is exactly four years before the death of Prince Henry in 1463, the limit of whoſe diſcovery we fix at Rio Grande, though Galvan informs us, that a ſingle ſhip or two had run down below the equator. Rio Grande is in latitude 11° N. and the Straits of Gibraltar in lat. 36° N. The Portugueſe had therefore advanced 25 degrees to the ſouth, that is, 1500 geographical, or 1750 miles Britiſh, which, with the circuit of the coaſt, may well be eſtimated at 2000 miles. But as Cape Agulhas is in latitude nearly 35° ſouth; 36° north and 35° ſouth amount together to 71 degrees, equal to 4970 Britiſh miles; ſo that if we reckon the 2000 miles of the Indian ſhip from Cape Diab, and the 2000 miles of the Portugueſe from the Straits of Gibraltar, the intermediate line would be 970 miles, excluſive of the winding of the coaſt; or if we reckon the 2000 miles of the Indian ſhip as commencing from Sofala, we muſt add 15 degrees in a right line, or 22 degrees of coaſt, as the ſpace between the diſcovery of the Indians and the Portugueſe: that is, in one inſtance we muſt add 1050 to 970, making 2020 miles Britiſh, and in the other 1540 to 970, amounting to 2510 miles of the ſame deſcription.

Different as this may ſeem from the eſtimation of Fra Mauro, and protracted as the intermediate line between the two diſcoveries may appear, even if this had been known in the court of Portugal, the difficulty would not have been thought too great to ſurmount. The

Portu-

Portugueſe had already extended their diſcoveries 2000 miles, and an additional progreſs of 2500 would have been deemed much eaſier to complete, than the firſt 2000 they had advanced. But they did not calculate upon ſo ample a ſpace; the eſtimation of Fra Mauro evidently diminiſhed their apprehenſions, and his error in this reſpect manifeſtly contributed to the proſecution of their deſigns; as the error of the ancient geographers in approximating China to Europe, produced the diſcovery of America by Columbus.

With theſe conſiderations we may cloſe our account of Fra Mauro's Planiſphere, ſo far as it regards the circumnavigation of Africa: and when we reflect that Diaz ſailed from Liſbon in 1486, only twenty-ſeven years after the date of this Planiſphere, we cannot withhold a due ſhare of praiſe and admiration from a geographer, who contributed ſo eſſentially to the diſcovery; neither can we ſufficiently commend the wiſdom of Alphonſo V. who joined theory to practice by the purchaſe of ſuch a work; or the fortitude and perſeverance of his people, who completed for the world the greateſt diſcovery that navigation has to boaſt.

The remaining parts of the Planiſphere are not connected with theſe great deſigns, neither do they contribute much to elucidate the navigation of the ancients. The merchant of the Periplûs had far better conceptions of the eaſtern coaſt of Africa and the Peninſula of India than are to be found in this work of Fra Mauro; for he ſeems, by his own confeſſion, to have conſulted miſſionaries, voyagers, merchants, and travellers, more than the works of authors ancient or modern; and yet, with all its errors, it is a performance of immenſe labour, perſevering reſearch, and great curioſity of collection: the Rubrick inſcribed upon it amply ſupplies the place of a memoir, and

almoſt in every inſtance ſuggeſts a variety of reflections to thoſe who are admirers of the ſcience. It is likewiſe a geographical picture of great beauty and magnificence: it does honour to the noble city to which it was dedicated, which was once the Tyre of the weſtern world, but has now fallen, and without a thirteen years ſiege, by another Nebuchadnezzar.

N. B. The Planiſphere is a circle of five feet eight inches Venice meaſure, nearly ſix feet ſeven inches Engliſh; the corners of the table are filled up with four ſmall circles, repreſenting, 1. The Ptolemaic ſyſtem and the ſpheres. 2. The ſyſtem of the elements. 3. The circles deſcribed on the terreſtrial globe. And 4. A miniature of our firſt parents in the act of being driven out of paradiſe, with the four rivers of that garden. It was found in ſuch a ſtate of preſervation, that very little of the original has been left out as illegible; and the teſtimonies from Venice of the fidelity of the copy are perfectly ſatisfactory. The Rubrick was written in Gothic letters and full of abbreviations; theſe the artiſt (Mr. Frazer) has ſupplied, and reduced the letter to a modern form, by which he has rendered the examination far more pleaſurable to the eye, and far more eaſy to the apprehenſion. In ſhort, he has completed the work highly to his own honour, and to the ſatisfaction of his employers: and it is but juſtice to add, that the ſpecimens he has produced of his excellence as a miniature painter place him high in his profeſſion, and in hopes of contributing to his ſucceſs at home, I think myſelf bound by a debt of gratitude to advertiſe the public, that his addreſs is No. 5, Suffolk-ſtreet.

Strahan and Preſton,
Printers-Street, London.

APPENDIX.

A CATALOGUE *of the* ARTICLES *of* COMMERCE

MENTIONED IN

THE DIGEST OF THE ROMAN LAW,

AND IN

THE PERIPLUS OF THE ERYTHREAN SEA.

AFTER the former part of this Work was publiſhed, a recommendation occurred in the Indian Diſquiſitions of Dr. Robertſon (p. 58.), to compare the Roman law in the Digeſt with the articles of commerce in the Periplûs. This taſk I undertook with great readineſs, and had the ſatisfaction to find the concurrence ſo general, as to encourage me to purſue the compariſon throughout. The concluſion derived from the performance of this taſk was a conviction that the digeſt was the beſt commentary on the Periplûs, the moſt ample proof of its authenticity, and the moſt complete illuſtration of the Oriental Commerce of the ancients. This conſideration led me to the deſire of conſolidating the two catalogues into one, in which I might concentre the proofs, and at the ſame time have an opportunity of correcting the errors I had been led into by my dependance on claſſical authorities, without a ſufficient knowledge of Natural Hiſtory. To this cauſe, I truſt, will be imputed, the defects of the former catalogue; and, though the ſame cauſe may ſtill ope-

rate, in a degree, I have now, however, been aſſiſted in removing many miſconceptions by the kindneſs of Dr. Falconer of Bath, and by that of his Son, who is a fellow-labourer with me in the illuſtration of ancient geography, and the tranſlator of the Periplûs of Hanno. To both of them I was known only by my publications, and unſolicited by me, both propoſed ſeveral corrections which I am happy to adopt. If the object of an author is the inveſtigation of truth, he will receive all friendly corrections with gratitude, rather than defend his errors with pertinacity or ill-humour. I am ſenſible alſo, that I ſtood in more need of advice than many others might have done, becauſe I came to this office with leſs information in Natural Hiſtory, than was requiſite for the undertaking. This, perhaps, might have been a ſufficient reaſon for declining it altogether; but I wiſhed to elucidate the author that I had before me; and, I truſt, that what I have done, will be acceptable to every reader who is not deeply verſed in Natural Hiſtory himſelf.

N. B. When an article in the following catalogue is found both in the Digeſt and the Periplûs, it will be marked D. P.; and with one of thoſe letters, when it occurs only in one of them.

When the obſervations are inſerted which I received from Dr. Falconer or his Son, thoſe of the Father will be marked F. F. and thoſe of the Son F.

Obſervations which are ſtill dubious will be marked Q.

THE

THE Reſcript of the Roman Emperors relating to the articles imported into Egypt from the Eaſt, is found in the Digeſt of the Roman Law, book xxxix. title xvi. 5, 7. in the edition of Gothofred, vol. i. p. 570, (beſt edition, vol. ii. p. 919.) and cited by Salmaſius Plin. Exercit. p. 1189. Paris edition, 1629. Ramuſio, vol. i. p. 371. Purchas, vol. ii. p. 33, and by Bergeron, &c. &c.

Neither Ramuſio or Purchas hav eentered into any diſcuſſion of the articles ſpecified, but enumerate them as they ſtand in the Reſcript, which Gothofred ſhews to be abundantly incorrect. Salmaſius has done much towards reſtoring the true reading, and much is ſtill wanting.

The law itſelf, or rather the Reſcript, is imputed by Ramuſio to Marcus and Commodus, and, ſtanding, as it does, between two other Reſcripts, which bear their name, it is probable that this opinion is right.

The paſſage which precedes the Reſcript in the Digeſt, is as follows:

" The Reſcript of Marcus and Commodus ordains, that no blame " ſhall attach to the collectors of the cuſtoms, for not noticing the " amount of the cuſtoms to the merchant, while the goods are in " tranſit; but if the merchant wiſhes to enter them, the officer is " not to lead him into error."

Upon this, it is only neceſſary to obſerve, that Commodus was aſſociated with his father Marcus Aurelius Antoninus, in the empire, four years before his death; that is, from the year 176 to 180. This makes the Reſcript more than a century later than the date I have aſſumed for the Periplûs. Anno 63. See ſupra, p. 57.

GENERAL TITLE OF THE SECTION.

Species pertinentes ad Vectigal,

Which may be rendered, " Particular articles [of Oriental Com-" merce] ſubject to duties [at Alexandria."] Or, if Species be confined to a ſenſe in which it was ſometimes uſed, it ſignifies *Spices*, gums, drugs, or aromatics. Salmaſius ſhews that the ſame term had been applied in Greek: Inferior Latinitas *ſpeciem* ſimpliciter dixit, ut Græci, Σιλφίου εἶδος. Λιβυκὸν εἶδος. P. 1050. And Dr. Falconer obſerves from Du Cange: Aromata, vel res quævis aromaticæ. Gallis, *Epices*.—Spices were mixed with wine Solomon's Song, viii. 2.; and in the middle ages this mixture was called Pigmentum, the Spicey Bowl; Potio ex melle et vino et diverſis ſpeciebus confecta. Du Cange.—Species is likewiſe uſed for the ingredients of a compound medicine before they are mixed. F. F.

ARTICLES *of* COMMERCE *mentioned in the* DIGEST, *and in the* PERIPLUS *of the* ERYTHREAN SEA, *aſſigned to* ARRIAN.

A

1. Ἀβόλλαι. *Abollæ.* P.

IF this term be Greek, it is remarkable that it ſhould not occur in any Greek Lexicon, and if it is Latin (as apparently it is), it is equally remarkable that a Greek merchant of Alexandria, ſuch as the

the author probably was, ſhould have introduced a Latin [1] term into his Greek catalogue; but Latin terms crept into purer Greek writers than our author, and commerce perhaps had adopted this, as expreſſing the actual garment which was neither uſed by, or formerly known to the Greeks. The Roman Abolla was a military cloke [2], perhaps not unlike our watch cloke. And the adoption of the word is not more ſtrange than the uſage of the Engliſh in adopting the French *Surtout*, or the French adopting the Engliſh *Redingote* (Riding Coat).

2. Ἄβολοι νόθοι χρωμάτινοι.

Single cloths dyed and imitating ſome of a ſuperior or different quality. But ſee Salmaſ. ad Vopiſcum.

Ἄβολοι, according to Salmaſius (Plin. Exercit. 1062,) are ſingle cloths, the ſame as ἁπλόϊδες, in oppoſition to διπλόϊδες, or double; but whether this relates to the texture, to the ornaments wrought on them, or the conſideration of their being with lining or without, ſeems difficult to determine. Our weavers call a ſilk, *ſhot*, when the warp is of one colour and the woof of another; and the word Ἄβολοι may be literally rendered *unſhot*; but it does not follow that this is an accurate rendering of the term. Homer mentions garments both ſingle and double; and Deborah makes the mother of Siſera ſay, that

[1] The word Abolla is not in Du Cange, but it is in Meurſius, who ſays, that the following article Ἄβολοι ought to be read Ἀβόλλαι. The gender of the adjectives uſed with Ἄβολοι is adverſe to this ſuppoſition.

[2] It ſeems worn as an outer military cloke by officers and men of rank. Ptolemy, ſon of Juba, king of Mauritania, grandſon of M. Antony by Selênè the daughter of Cleopatra, was killed by Caligula, who was a great grandſon of Antony, non aliâ de cauſâ quam quod edente ſe munus, ingredium ſpectacula coloratiſſe oculos hominum fulgore purpureæ *abollæ* animadvertit. Suet. Calig. c. 35. It was likewiſe a garb of the philoſophers, audi facinus majoris Abollæ. Juvenal.

her ſon had perhaps brought home a raiment of needle work, of needle work *on both ſides*, which is apparently correſpondent to the tunick, which Ulyſſes deſcribes to Penelopé (Od. lib. T. 230). If this interpretation, therefore, ſhould be admiſſible, Ἄβολοι χρωμάτινοι may be rendered *plain cloths of one colour*, and νόθοι would expreſs that they were of an inferior quality. But ſee the term διπλοείματος, Diog. Laertius in Diogene, p. 350. Horace. *Duplici*[3] *panno* patientia velat. And the addreſs of Plato to Ariſtippus in Diog. Laert. Ariſtip. p. 67. Σοὶ μόνῳ δέδοται καὶ χλαμύδα φορεῖν καὶ ῥάκος. "You are the "only Philoſopher who can aſſume with equal propriety the dreſs "of a gentleman (χλαμύδα), or the ordinary garb (ῥάκος) of a "cynick."

3. Ἀδάμας. *Diamond.* D. P.

The ancients certainly apply this word to our modern gem the diamond, but uſe it in a larger ſenſe as we ſtill uſe adamant, applied to other hard ſubſtances. But in the only paſſage where it occurs in the Periplûs, it is mentioned on a coaſt where diamonds very probably were to be purchaſed, and is joined with the Hyacinth or Ruby, and other tranſparent ſtones.

Theophraſtus thought the diamond indeſtructible by fire, which is now found to be a miſtake, F. Many experiments have been tried on this ſubject of late, and diamonds under the rays of a reflecting mirror, have been reduced to *charcoal!*

4. *Alabanda.*

A precious ſtone between a ruby and an amethyſt. Dutens, p. 16. But Hoffman renders it toys or trifles. See Coſmas, Ind. Mont-

[3] See Apollonius, Epiſ. iii. where διπλὰ is oppoſed to τρίβωνα.

fauçon,

ſauçon, Nov. Col. Patrum, p. 337. Ἡ Ταπρόβανη· εἶτα λοιπὸν εἰς τὴν στρεὰν ἐμπόριον, ἡ Μαραλλὼ βάλλουσα κοχλίους, ἔστι Καβὲρ βάλλουσα τὸ Αλαβανδηνόν. Marallo ſeems to be Marawar, and Kaber the Kaveri; and if pearls are the attribute of Marallo, ſome precious ſtone ſhould of courſe be the attribute of Kaber.

5. Ἀλόη. D. P.

There are two ſorts of Aloe, one a bitter cathartic, and another an aromatic, by ſome ſuppoſed to be the ſandal-wood. See Salm. Plin. Ex. 1056; but it is, to all appearance, the Agallochum of the Digeſt, mentioned ſtill under the name of Agala, as an odoriferous wood by Captain Hamilton, at Muſcat. Account of the E. Indies, vol. i. p. 68. It is probably uſed by the author of the Periplûs in the former ſenſe, as being mentioned on the coaſt of Oman in Arabia, where the Succotrine Aloe is naturally imported, as the iſland Socotra itſelf was under the power of the Arabs on the main, being ſubject to Eleazus king of Sabbatha, in the neighbourhood of Oman.

It is remarkable, that when the author arrives at Socotra, he ſays nothing of the Aloe, and mentions only Indian Cinnabar as a gum or reſin diſtilling from a tree. I was at a loſs to underſtand what this meant, till I learned from Chambers's Dictionary that the confounding of Cinnabar with Dragon's Blood was a miſtake of ancient date, and a great abſurdity. Dragon's Blood is ſtill procurable at Socotra.

6. *Amomum.* D. See *Kard-Amomum.*

7. Ἀνδριάντες. *Images.* P.

Theſe are mentioned as imported into Oman in Arabia; but whether as merely ornamental, or objects of ſuperſtition, does not appear. Dr. Falconer had ſuppoſed that theſe might be images, brought from the Eaſt like our China figures; but they are imports from Egypt into Arabia, and therefore probably Grecian workmanſhip. See Peripl. p. 16. F. F. & F.

8. Ἀργυρώματα, Ἀργυρᾶ σκέυη, Ἀργυρώματα τετορευμένα. *Plate, Plate poliſhed.* P.

Theſe works in ſilver do not appear to be the beautiful produce of Greek artiſts, but veſſels of plate adapted to the market. By the frequent mention of theſe articles, they muſt have formed a conſiderable branch of commerce.

9. Ἀρσενικὸν. *Arſenick.* P.

10. Ἀρώματα. *Aromatics.* P.

Drugs in general are comprehended under this term (Sal. Plin. Ex. p. 1049, 1050).

11. Ἀσύφη. *A ſpecies of Cinnamon.* See Κασσία. P.

B

12. Βδέλλα. *Bdellium.* P.

An aromatic gum, ſuppoſed to be imported from Africa, but now ſeldom uſed [t]. Salmaſius [s] deſcribes it as a pellucid exudation from

[t] Chambers in voce. [s] Plin. Exercit. p. 1150.

the

the tree ſo called, not quite clear, of a waxy ſubſtance, and eaſily melted, called by the Portugueſe *anime;* there are three ſorts, Arabian, Petræan, and Bactrian. It was imported, according to the Periplûs, from Binnagara, or Minnagara [Bekker], in Scindi, and from Barygaza [Baroach] in Guzerat.

The בְּדֹלַח Bhedolahh of ſcripture, Gen. ii. 12. Num. xi. 7. rendered bdellium, is by the Rabbis rendered chryſtal, and has nothing in common with the bdellium of the Periplûs but its tranſparency. The word bdellium ſeems a diminutive of the bdella uſed by our author. Pliny, b. xii. c. 9.

There are ſtill found three ſorts; two African, rather of dark brown hue; and one Aſiatic, anſwering the deſcriptions of Salmaſius, generally brought to England among parcels of myrrh. There are ſpeceimens of the African ſort in the collection of Dr. Burgeſs.

Bdella are ſuppoſed by Benjamin of Túdela to be pearls (p. 52. Bergeron); and oyſters, either he or his tranſlator calls reptiles: he finds them at Katiphan (el Katif). And Schikard interprets bedolach, pearls; but ſays they are not the bdellium of ſcripture. Pliny: tranſlucidum, ſimile ceræ, odoratum, et cum fricatur, pingue, guſtu amarum, citra acorem; aliqui Peraticum appellant ex Media advectum. Lib. xii. 9. or 19 Hardouin. Peraticum is the general term of the Periplûs for any article brought from beyond the Straits of Bab-el-mandeb; or, according to Hardouin, ἐκ τῶν πέρατων τῆς γῆς. In Pliny it is evidently a gum; the beſt ſort from Bactria, and the inferior ſpecies from Arabia, India, Media, and Babylon. It is alſo a gum apparently in the Periplûs. F.

13. *Beryllus.*

13. *Beryllus.* D. *Beryl, l'Aigue Marine, Aqua Marina.*

Some have miſtaken it for the cornelian, but the true beryll has the colours of ſea water. Pliny, xxxvii. 20. Hard. Probatiſſimi ſunt ex iis, qui viriditatem puri maris imitantur. It is a gem of great hardneſs, very brilliant, tranſparent, and of a green and blue colour delicately mixed, and varying according to the different proportions of either. Dutens.

14. *Byſſus, Opus Byſſicum.* D. *Byſſinon.—Cotton Goods.*

I underſtand there is a work of Dr. Reinhold Forſter, De Byſſo Antiquorum.

Γ

15. *Galbane, Galbanum.* D.

A gum from a ferula or fennel growing in Africa. Salm. p. 353. It is an emollient, and uſed in plaiſters; ſuppoſed to be derived from the Hebrew chelbena, fat. Exod. xxx. 34. Eccleſ. xxiv. 21. Chambers in voce.—" Galen, Dioſcorides, and Pliny, deſcribe it " alſo as the produce of a ferulaceous plant. Bubon Galbanum " foliolis rhombis, dentatis, ſtriatis, glabris, umbellis paucis. Linn. " Sp. Pl. p. 364. Little uſed as an internal medicine; but deſcribed " alſo by Nicander in the Theriacà." F. F.

16. Γέζειρ. Ζίγειρ. Γίζι. *A ſpecies of Cinnamon.* P. See Κασσία.

Zigeer in Perſick ſignifies ſmall. The ſmaller and finer rolls of caſſia were moſt valued, Dioſcorides ſays, the beſt ſort was called Gizi, which is a corruption of Zigeir.

17. Διχρόσσια,

Δ

17. Διχρόσσια, p. 8. *Dicroſſia.* — *Cloths either fringed or ſtriped.* P.

Κορσάι and κροσσάι, according to Salmaſius[6], from Heſychius, ſignifies the ſteps of a ladder, or in another ſenſe, the cornice of a wall, or the battlements. But he derives the ſame word from κείρω, to ſhave, and interprets κόρσοι, locks of hair. Hence cloths, διχρόσσια, he ſays, are thoſe which have a fringe knotted or twiſted.

But Homer uſes the word twice. 1ſt. Κρόσσας μὲν πύργων ἔρυσν καὶ ἔρειπον ἐπάλξεις. M. 258, where it agrees with the interpretation of Heſychius, the cornice of the wall, or as it may be rendered the *ſtep* of the parapet, a *rim* or *line* running round below the battlements. Not differing, perhaps, from the application of the word as uſed Ξ 35, where Homer ſays, the ſhips were too numerous to be drawn up on the ſhore in one *line.* Τῷ ῥα πρυκρόσσας ἔρυσαν[7], they therefore drew them in *lines* one behind another like the ſteps of a ladder. Agreeable to the other explanation of Heſychius, or as Apollonius renders it, ἀποκρημνίδματα, in *ſtripes*[8].

We may therefore conclude, that we cannot err much in rendering the Διχρόσσια of the Periplûs, either cloths *fringed*, with Salmaſius, or *ſtriped* with Apollonius. So Virgil, virgatis lucent ſagulis. The term uſed here is in conjunction with cloths. Ἄβολοι . . . . . καὶ λένια καὶ διχρόσσια, where perhaps ἄβολοι is in oppoſition to διχρόσσια. Λένια is the Latin word Lintea, and Meurſius in voce, ſays, λεντία ἄνρρτσα are plain linens, not ſtriped.

[6] Plin. Exercit. p. 762. [7] See Lennep in voce. [8] See Apollon. Lexicon in voce.

18. Δηνάριον. *Denarius.—The Roman coin, worth in general denomination nearly* 8*d. Engliſh.* P.

It appears by the Periplûs, that this coin was carried into Abyſſinia for the ſake of commerce with ſtrangers, and that both gold[a] and ſilver Denarii were exchanged on the coaſt of Malabar againſt the ſpecie of the country with advantage to the merchant.

19. Δάκα, Κιττὰ, Δάκαρ. P.

Are joined in the Periplûs with Kaſſia, and are ſuppoſed to be inferior ſpecies of the cinnamon. See Ramuſio, in his diſcourſe on the voyage of Nearchus, and Salmaſ. de Homonymiis Hyles Iatrices, c. xcii. c. xciii. a work referred to by Salmaſius himſelf, but I have not ſeen it.

20. Δάλικα. P.

Slaves of a better ſort and for the Egyptian market.

E

21. Ἔλαιον. *Oil of Olives.* P.

22. Ἐλέφας. *Ivory.* D. P. Ebur. D.

23. Ἐυόδια. *Fragrant ſpices or gums.* P.

Z

24. Ζῶναι σκιωτὰι. P.

Girdles or purſes wrought or embroidered. A great commerce throughout the eaſt is ſtill carried on in ſaſhes, ornamented with

[a] The gold Denarius, according to Arbuthnot, was the forty-fifth part of a pound of gold in the age of Nero.

every

every ſort of device, and wrought up with great expence. Σκιωταὶ does not occur in the lexicons, but probably means *ſhaded* of different colours.

25. Ζίγγιβερ. *Ginger.* D. P.

Not mentioned in the Periplûs, but by Salmaſius [11], who ſays the ancients knew little of it, and believed it to be the root of the pepper plant. It is applied to a ſpecies of cinnamon by Dioſcorides (p. 42.), poſſibly to an ordinary ſort from the coaſt of Zanguebar, and Zingiber itſelf may be derived from Zingi, the name of the African blacks on that coaſt.

H

26. Ἡμίονοι νωτηγοὶ. *Mules for the ſaddle.* P.

Θ

27. Θυμίαμα μοκρότε. *Gums or Incenſe.* D. P. Μοκρότε occurs only in the Periplûs, p. 7. and without any thing to render it intelligible.

I

28. Ἱμάτια βαρβαρίκα ἄγναφα τὰ ἐν Αἰγύπτῳ γινόμενα. *Cloths.* P.

For the Barbarine [12] market, undreſſed and of Egyptian manufacture.—The Barbarines are the ancient Troglodyte ſhepherds of Upper Egypt, Nubia, and Ethiopia, very graphically traced and diſtinguiſhed by Bruce.

[11] Plin. Exercit. p. 1070.

[12] The weſt coaſt of the Gulph of Arabia.

Ἱμάτια βαρβαρίκα σύμμικτα γεγναμμένα. *Cloths.* P.

For the Barbarine market, dreſſed, and dyed of various colours.

Ἱματισμὸς Αραβικὸς χειριδωτὸς ὅτε ἁπλῆς καὶ ὁ κοινὸς καὶ σκουτλάτος καὶ διάχρυσος. *Cloths.* P.

Made up, or coating for the Arabian market.

1. Χειριδωτὸς. P.

With ſleeves reaching to the wriſt.

2. Ὁ τε ἁπλῆς καὶ ὁ κοινὸς. See Ἀβολοὶ. P.

3. Σκουτλάτος. P.

Wrought with figures. From the Latin Scutum, Scutulatus; the figure being in the form of a ſhield. A dappled grey horſe is thus called Scutulatus.

4. Διάχρυσος. *Shot with Gold.* P.

5. Πολυτελὴς. P.

Of great price.

6. Νόθος. P.

In imitation of a better commodity.

7. Περισσότερος. P.

Of a better quality, or in great quantity.

8. Παντοῖος. P.

Of all ſorts.

9. Πολύμιτα

9. Πολύμιτα πολύμπα. P. Ezekiel, xxvii. 24. בִּגְלוֹמֵי בִּמְכֻלָּלִים *Polymitorum.* Vulgate, &c. *Pallis Hyacinthinis, Chlamydibus coccineis.* Chald. Parap.

Of thicker woof, or larger woof than warp. Q.

29. Ινδικον μελαν. P. *Indico.* Salmaſ. & Hoffman in voce.

See Pliny, xxxv. 27. Hard. cited by Hoffman, where it is manifeſtly indico, uſed both as a colour and a dye.

30. Ἵπποι. *Horſes.*

As preſents, and as imports *into* Arabia.

K

31. Κάγχαμος. *Kankamus—Gum Lack.* D. P.

According to Scaliger; and Dioſcorides calls it a gum. But Salmaſius rather inclines to think it a drug like myrrh. Lack was uſed as a purple or blue dye by the Indigo dyers. Ινδικοβαφοι. Salmas. Plin. Exercit. 1148. 1152. Plin. xii. 20. See Pomet's Hiſtory of Drugs, b. viii. p. 199, who ſays gum of four colours was found in one lump. He does not hold it to be Gum Lack, but that it has a ſmell like it; it is found in Africa, Braſil, and Saint Chriſtopher's. Pomet's Specimen was from the Weſt Indies.

32. Κάλτις. *Kaltis—A Gold Coin.* P.

According to the Periplûs it was a coin of this name current in Bengal, and that the metal was collected from a mine in the neighbourhood. Stuckius ſays, a coin called Kalais is ſtill current in

Bengal, on what authority does not appear. Paolino notices the word, but I cannot recal the paſſage to my memory; it is called Kalteen in Bengal, or Kurdeen, in the Ayeen Acbari at preſent. Aſ. Reſ. vol. v. p. 269.

33. Καρδάμωμον. *Kardamom.* D.

Both the Amomum and Cardamomum are mentioned in the Digeſt, and are ſuppoſed by Dr. Burgeſs to be the ſame aromatic, and that amomum has the addition of kar, from its reſembling an heart, which it does. The doubts of Natural Hiſtorians on this ſubject are numerous, and Salmaſius, after much learned diſquiſition, leaves the queſtion undetermined. (See article Koſtamomum.) But the opinion of my friend Dr. B. is this, that the kardamomum differs from the amomum chiefly as to its outward appearance in the ſhape of the pod or the veſſels in which it is contained. The true amomum, he ſays, is from Java, its pod is in the ſhape of a naſturtium, under which title it is deſcribed by Pliny, while the kardamomum is in the form of an heart. It is brought from Sumatra, Ceylon, and Africa. The Sumatran approaches neareſt that of Java, both in ſhape and flavour, but none of the ſorts are equal to the Javan; the flavour is aromatic, warm, and pungent, in which qualities it is reſembled by all thoſe ſpecies which take the addition of amomum, and I have been favoured with ſpecimens of all the different ſorts by Dr. B. Theophraſtus ſays both come from Media; others derive them from India. Martin Virg. eclog. iii. 89. Aſſyrium amomum, equivalent to Median. Galen ſays it is conſiderably warm: θερμῆς δυναμέως ἱκανῶς. Stephan. in voce. The Καρδάμωμον ἰδίαν καὶ ἀρωματικώτερον, τῆς θερμῆς δυναμίως ἀσθενεστέρας. Stephan.

in

in voce. Warmth and pungency are therefore the qualities of both, and the difference in degree accords with the two ſpecimens of Dr. B. Whether the Greeks firſt found theſe in Media and Aſſyria, or whether there were aromatics in thoſe countries reſembling thoſe of India, may ſtill be doubted. The Greeks called cinnamon the produce of Arabia, till they had a knowledge of that country themſelves.

Murray, vol. i. p. 65, doubts the origin of the name; for he ſays, "The Indians call it cardamon, but thinks it very dubious, whether "the cardomum of the ancients be the ſame. The pericarpium of "the leſſer cardomum has obſcurely the ſhape of a heart. Lewis "ſays it is deſcribed in the Hortus Malabaricus under the title of "Elettari." F. F. What is added muſt compel me to retract my ſuppoſition, that amomum expreſſes warmth and pungency. "Notârunt viri docti ἄμωμον λιβανῶτον, thus eſſe et ſincerum et inculpatum, veteresque ἄμωμον vocâſſe omne aroma quod purum et non "vitiatum eſſet. Bodæus a Stapel. Theophraſt. p. 981. Stephan. "in voce, Ἄμωμον." E. F. But in Stevens I find λίβανος ἀμωμίτης, and not ἄμωμον λιβανῶτον.

If the opinion of Dr. Burgeſs be right, which ſeems highly probable, and this aromatic be found only in Java and Sumatra, or perhaps in Ceylon, it argues in favour of the Periplûs, which is ſilent upon this ſubject; for the veracity of the merchant is as much concerned in not noticing what he had not, as in deſcribing what he had ſeen.

34. *Capilli Indici.* D.

35. Καρπάσος.

35. Καρπάσος. *Karpaſus—Fine Muſlins.* D. P.

Oppoſed to ordinary cottons. It is remarkable that the native Shanſkreet term is *Karpaſi*, as appears by Sir William Jones's catalogue. Aſiat. Reſ. vol. iv. p. 231. Calcutta edition. But how this word found its way into Italy, and became the Latin Carbaſus (fine linen) is ſurprizing, when it is not found in the Greek language. The Καρπάσιον λίνον of Pauſanias (in Atticis), of which the wick was formed for the lamp of Pallas, is Aſbeſtos, ſo called from Karpaſos, a city of Crete. Salm. Pl. Exercit. p. 178.

Carbaſo Indi corpora uſque ad pedes velant eorumque rex aurea lectica margaritis circum pendentibus recumbit diſtinctis auro et purpurâ carbaſis qua indutus eſt. Q. Curtius, lib. viii. c. 9. F.—I owe this paſſage to Mr. Falconer, and think it may confirm the reading of Salmaſius of Σινδόνες μαργαρίτιδες, for Σινδόνες Εβαργέιτιδες. Peripl. p. 34. So Lucan alſo, Pharſ. iii. 239.

Fluxa coloratis aſtringunt carbaſa gemmis. F. Karpeſium is a medicinal juice. Dioſcor. A poiſonous juice. Galen. It is a ſubſtitute for cinnamon, or a ſpecies of that ſpice. Ἀντὶ Κινναμώμου Καρπήσιον. And ἀντὶ Κινναμώμου Κασίας· τὸ δὶπλοῦν ἢ Καρπήσιον. The different ſpecies are unknown. Salmaſ. p. 1306.—Has Καρπήσιον any reference to the Κάρφη of Herodotus?

36. Καρυοφυλλον. D. *Garofalo*, It. *Girofle*, Fr. *Clou de Girofle*, Fr.

Our Engliſh clove is probably from clou, a nail, which the clove reſembles, but not without a poſſibility that it may be a contraction of girofle. The garyophyllon of Pliny is not the clove. F. F. The clove is a ſpice of the Moluccas, which is the reaſon that the Merchant

Merchant of the Periplûs did not ſee it or record it; neither do I find it in the catalogue of Dioſcorides (Matthioli) as an Oriental ſpice. It ſhould ſeem therefore from Pliny, the Periplûs, and Dioſcorides, that this ſpice was not known early to the ancients; and the reaſon was, becauſe they did not go farther eaſt than Ceylon. Salmaſius, however, is of a different opinion, as I learn from Dr. Falconer, who cites his work, De Homonym. Hyles Iatric. c. 95.—which I have not ſeen:

Vidit Plinius Caryophyllon quale apud nos frequens viſitur cujus in ſummo clavi capite rotundum extat tuberculum piperis grano ſimile, ſed grandius et fragile, multis veluti fibris intus refertum. Calicem floris eſſe volunt adhuc conniventem, et nondum apertum, videtur exiſtimaſſe Plinius eſſe fructum ipſum pediculo ſuo inſidentem et inhærentem, nam clavus eſſe plane ligneus, et ſurculi inſtar habere ei viſus eſt. . . . . Caryophyllum ad condimenta olim uſurpatam ut piper et coſtum, &c. . . oſtendunt apicii excerpta; . . . . . quod dixit Plinius de odore Caryophyllorum fidem facit non alia fuiſſe ejus ætate cognita quam quæ hodie habentur, &c. Dr. F. is not convinced by Salmaſius, and his doubt is well founded. F. F. Coſmas mentions the *Ξυλοκαρυφυλλον* at Ceylon, and Hoffman (in voce) informs us, that the wood of the clove-tree is now uſed in odoriferous compoſitions and unguents. It is a circumſtance in favour of the veracity of the Periplûs, that the Merchant has not recorded this ſpice; and of Coſmas, that his friend Sopatrus ſaw only the wood. An hundred years later than the Periplûs, it had found a place in the Digeſt: the cuſtom-houſe at Alexandria received not the imports of one merchant only, but every thing that found its way by any conveyance from the Eaſt. It ought not to

be

be omitted, " that caryophyllon is poſſibly not derived from the " Greek; for the Turks uſe the term Kalafur, and the Arabs, Ka- " rumfel, for the clove." Nieuhoff. Leg. Batav. vol. ii. p. 93. F. F. Still it may be inquired, whether the Arabic karumfel may not be borrowed from the Greek karuophyl: many Greek terms for plants, drugs, &c. adopted by the Arabs, are noticed by Salmaſius.

37. Κασσία. *Kaſia.* D. P.

This ſpice is mentioned frequently in the Periplûs, and with various additions, intended to ſpecify the different ſorts, properties, or appearances of the commodity. It is a ſpecies of cinnamon, and manifeſtly the ſame as what we call cinnamon at this day; but different from that of the Greeks and Romans, which was not a bark, nor rolled up into pipes like ours. Their's was the tender ſhoot of the ſame plant, and of much higher value, ſold at Rome in the proportion of a thouſand denarii [12] to fifty; it was found only in the poſſeſſion of Emperors and Kings; and by them it was diſtributed in preſents to favourites, upon ſolemn occaſions, embaſſies, &c.

That it was the tender ſhoot, and not hollow, may be proved from Pliny, lib. xii. 19, where he informs us that Veſpaſian was the firſt that dedicated crowns of cinnamon incloſed in gold filagree (auro interraſili) in the Capitol, and the Temple of Peace; and that Livia dedicated the root in the Palatine Temple of Auguſtus; after which he adds, that the caſia is of a larger ſize than the cinnamon (craſſiore ſarmento), and has a thin rind rather than a bark, and its value conſiſts in being *hollowed out* (exinaniri pretium eſt). He adds, that the beſt ſort has a ſhort pipe of this rind or coating (brevi tunicarum

[12] Pliny.

fiſtulâ

fiſtulâ et *non* fragili, *lege* et fragili); this Caſia is manifeſtly a Cinnamon, and by conſulting the two chapters of Dioſcorides on Caſia and Cinnamon, the beſt caſia called Daphnitis, at Alexandria, is doubtleſs the ſame. Matthioli, p. 42; and again his cinnamon is, "*ſottile di rami*," a very fine ſpray, with frequent knots, and ſmooth between the joints. Salmaſius cites Galen, who compares the Karpaſium τοῖς Κινναμώμου ἀκρέμοσι, to the extreme ſhoot or ſpray of cinnamon, and ἀκρέμοσι is ſo peculiarly expreſſive of this, as to remove all doubt, (p. 1304, Plin. Ex.) but if our cinnamon is the ancient caſia, our caſia is again an inferior ſort of cinnamon; both are known to our druggiſts and grocers; and ſince the conqueſt of Ceylon, the duty is lowered on *our* cinnamon, and raiſed on *our* caſia. The reaſon of which is plain; becauſe the true and beſt cinnamon is wholly our own by the poſſeſſion of Ceylon, and caſia is procurable from Sumatra, and ſeveral of the eaſtern iſles. (See Marſden's Sumatra, p. 125.) It is plain, therefore, that we adopt cinnamon for the caſia of the ancients, and caſia for an inferior cinnamon. Whether the cinnamon and caſia of the ancients were both from the ſame plant, may be doubted; for there are different ſpecies even of the beſt ſorts, as we learn from Thunberg; but that both had the ſame virtue, though not equal in degree, we are aſſured by Galen, who informs us, that two parts of caſia are equal to one of cinnamon. (Matthioli, p. 46.) And Galen examined both when he compoſed the Theriac for the emperor Severus.

I am confirmed in the opinion I had formed by Dr. Falconer, who (after citing Linnæus, Combes, Philoſ. Tranſact. 1780, p. 873.; Doſſie's Memoirs of Agriculture, p. 202.; Solander; Thunberg, Vet. Acad. Hanbl. 1780, p. 56.; and Murray, Apparat. Med. vol. iv. pp. 441, 442. edit. Gotting. 1787) writes thus: "I myſelf

" compared two bundles, one of caſia and another of cinnamon,
" and in preſence of all the phyſicians and ſurgeons of the Ge-
" neral Hoſpital at this place [Bath], and none of us could find any
" difference in the ſize of the pieces, in the taſte, flavour, colour,
" or ſmell of the different articles, either in quality or degree."
Theſe are the two ſpecies as now diſtinguiſhed; that is, the cinnamon of Ceylon, and the caſia (ſay) of Sumatra. He then adds:
" Perhaps it may be true that the ſmall branches were called cinna-
" mon [by the ancients], but the difference between that and caſia
" was ſmall. Galenus palam prodit (inquit Matthiolus in Dioſco-
" ridem) caſſiam ſæpenumero in cinnamomum tranſmutari, fate-
" turque ſe vidiſſe caſſiæ *ramulos* omni ex parte cinnamomum refe-
" rentes, contra pariter inſpexiſſe cinnamomi ſurculos caſſiæ prorſus
" perſimiles. Matthiol. Dioſcor. p. 34. he ſays, the ſticks of cin-
" namon are not in length above half a Roman foot; and Dioſco-
" rides, in Matthioli's tranſlation, uſes the words tenuibus *ramu-*
" *lis*." F. F.—See alſo Larcher, Herod. tom. iii. p. 375. who ſuppoſes that the exceſs of price in the ſpray, was occaſioned by its cauſing the deſtruction of the plant when ſo cut.

This ſort we muſt firſt conſider, becauſe they themſelves applied the name improperly, having it derived, by their own account, from the Phênicians [13], and giving it to the ſame production, though in a different form and appearance from that by which it is known to us.

The kinnamomum of the Greeks and Romans was neceſſarily derived from the Phênician [14], becauſe the merchants of that country firſt brought it into Greece. The Greeks themſelves had no direct

[13] Herodotus, lib. iii. p. 252. ed. Weſſ. by Larcher, of turning the Phenicians into a
[14] See a curious miſtake of Pliny's noticed phœnix. Tom. iii. p. 349.

commu-

communication with the eaſt; and whether this ſpice was brought into Perſia[15] by means of the northern caravans, or by ſea into Arabia, the intermediate carriers between either country and Greece were of courſe Phênicians. It will therefore be no difficult matter to prove that the Phênician term expreſſes the cinnamon we have, and not that indicated by the Greeks and Romans. The term in all theſe languages ſignifies a pipe; for the Hebrew קָנֶה kheneh is the Latin canna; and ſyrinx, fiſtula, cannella, and cannelle, convey the ſame idea in Greek, Latin, Italian, and French. The Hebrew term occurs in Exodus, xxx. 23, 24. joined with caſia, as it is almoſt univerſally in the writings of the Greeks and Romans. It is ſtyled Sweet Cinnamon, and is written קִנְמֹן בֶּשֶׂם[16], khinemon beſem, the ſweet or ſweet-ſcented pipe; and the word rendered Caſia by our tranſlators[17] is קִדָּה khiddah, from khadh, to ſplit or divide longways. Theſe two terms mark the principal diſtinctions of this ſpice in all theſe languages; as khinemon beſem, Hebrew; caſia ſyrinx, Greek; caſia fiſtula[18], Latin; cannelle, French; and

[15] By Perſia is meant the whole empire.

[16] The whole 30th chapter is worth conſulting on this curious ſubject, as it proves that many of the Oriental ſpices and odours were, even in that early age, familiar in Egypt.

[17] If from this chapter of Exodus we prove that cinnamon was known to the Hebrews in the age of Moſes, we have a ſecond proof of its being uſed in the embalmment of the mummies from Diodorus, lib. i. 91. tom. i. p. 102. Larcher, tom. ii. p. 334.

[18] The caſia fiſtula of the moderns is a drug totally diſtinct: it is a ſpecies of ſenna which comes from the Levant, Egypt, Braſil, and the Antilles, and is a corruption from Acacia. Salm. Plin. Ex. p. 540. Certe caſiæ nomen pro ea ſpecie quæ ſolvit alvum ex *Acacia* factum quamvis diverſum ſit genus. Id. p. 1056. This corruption is not of very modern date; for Salmaſius adds, Ut mirum ſit ante hos trecentos et amplius annos, caſiam ſiſtulam Latinis dictam, eam quæ purgandi vim habet, See alſo Ramuſio, vol. i. p. 282.

Mr. Falconer doubts concerning the caſia fiſtula, but acknowledges that Bodæus on Theophraſtus, p. 293. is of a contrary opinion. F. I cannot help thinking that the authorities here produced, in conformity to Bodæus, muſt preponderate.

in the ſame manner the inferior ſort is khiddah, Hebrew; xylo-caſia [19], Greek; caſia lignea, Latin.

Whether the Greeks and Latins derive their term from the Hebrew khine-mon [20], or from the compound kheneh-amomum, is not ſo eaſy to determine; for amomum is a general term [21] for any warm drug or ſpice, and kin-amomum, in this form, would be again the ſpice-canna, the caſia fiſtula under another deſcription. But that the caſia fiſtula and the caſia lignea are marked as the two leading diſtinct ſpecies, from the time of Moſes to the preſent hour, is ſelf-evident. And I now ſay, that if the Romans applied the term Cinnamon to the tender ſhoot of this plant, and not to the pipe cinnamon, ſuch as we now have it from Ceylon, their uſe of the word was improper. That this was the caſe, there is reaſon to think; but that there was ſome obſcurity or fluctuation in their uſage, is certain alſo.

Salmaſius [22] quotes Galen to prove that the plant itſelf was brought to the emperor Marcus Aurelius, from Barbarikè [23], in a caſe ſeven

[19] This ſpecies is diſtinctly marked in the Roman Law de publicanis, leg. xvi. D. Caſia-ſyrinx, Xylo-caſia. Salm. 1055. id. in Canticis Salomonis, Nardus, Crocus, Fiſtula cinnamomum. It is called Σκληροτιρὰ, Hard Caſia, in the Periplûs.

[20] קִנָּמֹן is from קָנֶה, a reed, canna, and the termination doubtful, but probably from מָנָה מָן, peculiar. It is in this ſenſe that מָנָה, manna, ſignifies the food from Heaven; the *peculiar* food or bread. And hence קִנָּחֲמָן, the peculiar canna, by way of pre-eminence. Parkhurſt derives it not from קָנָה, canna, but from קָנַם, khanam, to ſmell ſtrong, but he allows there is no ſuch verb in Hebrew. I cannot help thinking that קִנֶּה בֶּשֶׂם, khenneh beſem, and קִנָּמֹן בֶּשֶׂם, khinnemon beſem, have the ſame root. The ſweet khenne, the ſweet khinnemon. Notwithſtanding khenneh beſem is rendered calami odoriferi, the ſweet calamus, it is certainly not technically the calamus aromaticus.

[21] Salm. 401.

[22] Plin. Ex. p. 1304. Galen de Antidotis, lib. i.

[23] Barbarikè is perhaps not a proper name, but the port frequented by the Barbars of Adel or Moſyllon. It is the mart in Scindi; but whether Patala or Minnagara, is difficult to determine.

feet

feet long. Galen ſaw this, and there were other caſes of a ſmaller ſize, containing ſpecimens of an inferior ſort. This, therefore, muſt be in a dry ſtate; but this he ſays was the true cinnamon. Undoubtedly it was, for the plant itſelf, and the ſpice, as we have it, in its uſual form, have this difference and no more. But Galen ſays, in another paſſage [24], that caſia and cinnamon are ſo much alike that it is not an eaſy matter to diſtinguiſh one from the other. And Dioſcorides writes, "Caſia grows in Arabia; the beſt ſort is "red, of a fine colour, almoſt approaching to coral, ſtrait, long, "and pipy, it bites upon the palate with a ſlight ſenſation of heat, "and the beſt ſort is that called Zigir, with a ſcent like a roſe." This is manifeſtly the cinnamon we have at this day; but he adds, "cinnamon has many names, from the different places where it [is "procured or] grows. But the beſt ſort is that which is like the "caſia of Moſyllon, and this cinnamon is called Moſyllitic, as well "as the caſia." This therefore is only a different ſort of the ſame ſpice, but it does not grow either in Arabia or at Moſyllon, it took its name from either country, as procured in the marts of either. This traffic is explained in the Periplûs, but Dioſcorides was unacquainted with it. The deſcription [25] he gives of this cinnamon is, "That when freſh, and in its greateſt perfection, it is of a dark "colour, ſomething between the colour of wine and [dark] aſh, "like a ſmall twig or ſpray full of knots, and very odoriferous." This is manifeſtly not our cinnamon, but the ſame as Galen's, the tender ſhoot and not the bark. It is worth remarking that Dioſcorides lived in the reign of Nero [26], and if the true ſource of cinna-

[24] See Ramuſio, vol. i. p. 282. The whole of this is from Ramuſio.

[25] See Larcher's whole Diſſertation, tom. iii. p. 348. He is equally indebted to Salmaſius as myſelf.

[26] Hoffman in voce.

mon

mon was then juſt beginning to be known by means of the navigation detailed in the Periplûs, this knowledge had not yet reached Aſia [27] Minor or Rome. Pliny who lived a few years later had juſt arrived at this information, for he ſays expreſsly, Moſyllon was the port to which cinnamon was *brought* [28], and conſequently the port where it was procured by the Greeks from Egypt, and through Egypt conveyed to Rome. It had long been procured there, and long obtained the name of Moſyllitic, but it was now known not to be native, but imported at that place.

The trade to Moſyllon was opened by the Ptolemies; ſtill, before the exiſtence of a Grecian power in Egypt, the Greeks had probably little knowledge of it, but from the importation of it by the Phênicians; and the Phênicians received it, either by land-carriage from the Idumeans of Arabia, or when they navigated the Red Sea themſelves with the fleets of Solomon, they obtained it immediately from Sabêa; perhaps alſo, if Ophir is Sofala on the coaſt of Africa, they found it either at that port, or at the others, which the Greeks afterwards frequented. Theſe lay chiefly in Barbaria, (the kingdom of Adel,) comprehending the ports of Moſyllon, Malao, and Mundus, where it was poſſibly always to be met with. This commerce indeed is at beſt only conjectural, neither could it be of long duration, as it ended with the reign of Solomon, and was never reſumed; but that the Phênicians had a ſettled intercourſe with Sabêa we learn incontrovertibly from Ezekiel [29], and that Sabêa was the centre of Oriental commerce, is proved in our account of the Periplûs.

[27] Dioſcorides was a native of Anazarba; but whether he wrote there or at Rome, I have not been able to diſcover.

[28] Portus Moſyllites quo cinnamomum *devehitur*. Lib. vi. c. 29.

[29] Cap. xxvii. v. 23. Sheba is Sabêa.

It

It is this circumſtance that induced all the early writers to impute the produce of India to the ſoil of Arabia; an error which commenced with the firſt hiſtorians extant, and which exiſted in hiſtory till the age of Pliny, and in poetry almoſt to the preſent hour. Fable is the legitimate progeny of ignorance; we are not to wonder, therefore, when we read in Herodotus[30], that caſia grew in Arabia, but that cinnamon was brought thither by birds from the country where Bacchus was born, that is India. The term uſed by Herodotus indicates the cinnamon we now have; for it ſignifies the peel, hull, or rind[31] of a plant, and evidently points out the bark, under which form we ſtill receive this ſpice. The error of Herodotus is repeated by Theophraſtus, who aſſigns both caſia and cinnamon to Arabia[32]: this intelligence I receive from Bochart; and I am obliged to him alſo for a very curious citation from Uranius, in Stephanus de Urbibus, who ſays, the country of the Abaſenes produces myrrh, aromatic gums or odours, frankincenſe, and the bark [of cinnamon][33]. This paſſage is valuable as the firſt inſtance extant in which the name of Abyſſinians is mentioned. But it is not to be depended on, unleſs it can be referred to the conqueſts of that nation in Arabia, for theſe Abaſeni are evidently joined with the Arabians of Sabêa and Hadramaut.

But whatever errors are to be found in ancient authors, relative to the production of ſpices in general, and cinnamon in particular,

[30] Lib. iii. p. 252. ed Weſſ. and p. 250. where he mentions a ſimilar fable of ſerpents which guard the frankincenſe.

[31] Κάρφος, from Κάρφω, arefacio, to dry; and hence the dry hull, peel, or ſhell of a plant or fruit.

[32] Bochart, vol. i. p. 105. Sir William Jones, Aſ. Reſ. iv. 110. 113.

[33] Ἡ χώρα τῶν Ἀβασηνῶν φέρει καὶ ὄσσον [quod ὄχνη] καὶ θυμίαμα καὶ ΚΕΡΠΑΘΟΝ. Bochart, vol. i. p. 106. Κέρπαθον is probably the Κάρφια of Herodotus, unleſs it is a falſe reading for Κάρπαθον or Κάρπασον, one of the terms for cotton.

ſtill

ſtill that they found their way into Egypt, Paleſtine, Greece, and all the countries bordering on the Mediterranean, in the earlieſt ages, is a fact. This admits of proof from the thirtieth chapter of Exodus, and we have traced the courſe of their introduction in the preliminary diſquiſitions of the firſt book.

We may now, therefore, proceed to examine the various ſorts of this ſpice mentioned in the Periplûs, which amount to ten; and very remarkable it is, that the modern enumeration of profeſſor Thunberg ſhould comprehend juſt as many ſpecies. Not that it is to be ſuppoſed the ſpecies correſpond, but the coincidence of number is extraordinary. It is worthy of notice alſo, that cinnamon is a term never uſed in the Periplûs; the merchant dealt only in caſia; cinnamon was a gift for princes. There is, even in this minute circumſtance, a preſumption in favour of his veracity, not to be paſſed without obſervation.

It has been already mentioned in the account of Ceylon, that the ancients, who firſt referred this ſpice to Arabia, and afterwards to the cinnamomifera regio in Africa, as ſuppoſing it to grow in thoſe countries becauſe they procured it there, never mention it in Ceylon. I think, with Sir William Jones, that this is one of the obſcureſt circumſtances in ancient commerce. Can we conceive that it grew there in any age, and was afterwards eradicated? or muſt we not rather conclude, in conformity to the ſuffrages of all the moderns, that there is no genuine cinnamon but that of Ceylon, and that the commerce itſelf was a myſtery? The firſt author that mentions cinnamon in Ceylon is the Scholiaſt on Dionyſius Periegetes; at leaſt I have met with no other, and I mention it to promote the inquiry.

The

The ten ſorts in the Periplûs are,

1. Μοσυλλιτικὴ. *Moſyllitick.* P.

So called from the port Moſyllon, where it was obtained by the Greeks from Egypt, and whither they always reſorted, from their firſt paſſing the Straits of Bab-el-Mandeb. It was the caſia fiſtula; the ſame as we now have from Ceylon, and imported at Moſyllon directly from India, or from the Arabian marts on the ocean, which were rivals of the Sabêans. It is mentioned by ſeveral authors as the beſt ſort, or inferior only to zigeir, and therefore could not be native: there is indeed cinnamon on the coaſt of Africa, but it is hard, woody [34], and of little flavour. The regio cinnamomifera of Ptolemy bears no other ſort but this: he places this tract at the boundary of his knowledge, that is, between Melinda and Moſambique; and if it is in any way entitled to the name, it cannot be from its own produce, but on account of the importation of the ſpice from India; the traders who found it there, might ſuppoſe it native, in the ſame manner as the early writers ſpeak of the Moſyllitic, and which (as has been already noticed) Pliny firſt mentions as imported. The Moſyllitic ſpecies is rarely called cinnamon by the ancients, but caſia only. Their cinnamon was exhibited as a rarity, like that of Marcus Aurelius before mentioned. Antiochus Epiphanes [35] carried a few boxes of it in a triumphal proceſſion; and Seleucus Gallinícus preſented two minæ of this ſpecies, and two of caſia, as the gift of a king to the Mileſians. The caſia, or modern

[34] Seven different ſorts Oriental, and two American, I have ſeen in the collection of Dr. Burgeſs; and an African ſpecies, which is not a bark, but a mere ſtick, with little flavour. It anſwers well to the character of σκληροτερὸς.

[35] Athenæus, lib. v. p. 195. lib. ix. p. 403.

cinnamon was found formerly in Java, Sumatra, and the coaſt of Malabar; from the coaſt of Malabar it found its way to Africa and Arabia; but when the Dutch were maſters of Cochin[36], they deſtroyed all the plants on the coaſt, in order to ſecure the monopoly to Ceylon; and none is now met with on the coaſt, but an inferior wild ſort, uſed by the natives, and brought ſometimes to Europe for the purpoſe of adulteration.

2. Γίζειρ, Ζίγειρ, Γίζι. *Gizeir*, *Zigeir*, *Gizi*. P.

This ſort is noticed and deſcribed by Dioſcorides, as already mentioned; and to his deſcription I can only add, that zigeir, in Perſian and Arabic, as I am informed, ſignifies *ſmall*[37]. The ſmaller bark muſt of courſe be from the ſmaller and tenderer ſhoots, which is ſtill eſteemed the beſt; the harder and thicker bark is cut and made to roll up in imitation of this, but is inferior, though from the ſame plant. This at leaſt is ſuppoſed; but I do not ſpeak from authority.

3. Ἀσύφη. *Aſuphè*. P. Aſyphemo in Matthioli, p. 42. Perhaps for Ἀσύφηλος.

This term, if not Oriental, is from the Greek ἀσύφηλος, aſuphélos, ſignifying *cheap* or *ordinary*; but we do not find aſuphè uſed in this manner by other authors: it may be an Alexandrian corruption of the language, or it may be the abbreviation of a merchant in his invoice.

[36] The Dutch are accuſed of this by their rivals, as well as diminiſhing the growth of nutmegs, &c. in the Molucca Iſlands. But I obſerve in the account of Hugh Boyd's Embaſſy to Ceylon (Ind. Annual Regiſter, 1799), an aſſertion, that the true cinnamon never grew any where but in Ceylon.

[37] I doubt this relation at the ſame time I notice it; but an inquiry might ſtill be made, whether the Greek term *caſia* be not a corruption of *gizi*.

4. Ἄρωμα.

4. Ἄρωμα. *Aroma.* D. P.

Aroma is the general name for any warm ſpice or drug; but it is twice inſerted in a liſt of caſias, and is therefore probably a ſpecies as well as the others. It would intimate an aromatic ſmell or flavour, and is poſſibly one of ſuperior quality. It is remarkable that Moſes uſes the ſame term of ſweet-ſcented cinnamon.

5. Μώγλα. *Mógla.* P.

A ſpecies unknown.

6. Μοτὼ. *Motó.* P.

A ſpecies unknown.

7. Σκληροτερὰ. *Sclerotera.* D. P. *Xylo Caſſia, Wood Cinnamon.* D.

From the Greek Σκληρὸς, hard. This is a term which occurs frequently, and perhaps diſtinguiſhes the caſia lignea (wood cinnamon) from the caſia fiſtula (cannelle or pipe cinnamon): it may, however, ſignify only a hard and inferior ſort, in oppoſition to brittleneſs, which is one of the characters of the ſuperior ſpecies.

8, 9, 10. Δώακα, Κιττὰ, Δάκαρ. *Dooaka, Kitta, Dacar.* P.
Dacar is noticed by Dioſcorides, Matthioli, p. 42. and Moto by Galen. F.

All unknown. But Salmaſius, and other commentators, agree in ſuppoſing them all to be ſpecies of the ſame ſpice.

Under Caſſia, in the Digeſt, are mentioned,

1. *Turiana vel Thymiama*, and
2. *Xylo Caſſia.*

Turiana and Thymiama are expreſſions for the ſame thing in Latin and Greek—Incenſe. Kaſia was mixed perhaps with incenſe in the temples, as well as other aromatic gums and odours. See Hoffman in Thymiama. But Dr. Falconer ſuppoſes theſe not to be different ſpecies of caſia, or mixtures with it, but ſimply thus and thymiama; which, however, xylo caſſia ſeems to contradict. He thinks alſo, "that turiana may be the laurus caſſia which grows in "Spain, on the river Turia or Guadalaviar."

"Floribus et roſeis formoſus Turia ripis."
Claudian de Laudibus Serenæ, 72.

Theſe are the ten ſorts enumerated in the Periplûs [38]. Profeſſor Thunberg, who viſited Ceylon in his voyage from Batavia, reckons ten ſorts likewiſe. Four of nearly equal value and excellence; three that are found only in the interior above the Ghauts [39], in the government of the king of Candi; and three which are not worth gathering. The moſt remarkable which he mentions are:

The raſſe [40] or penni-curundu, honey cinnamon, and capuru curundu, or camphor cinnamon, from the root of which camphor is diſtilled: this laſt is found only in the interior. The cinnamon for the European market was collected in the woods by the natives employed in the Dutch ſervice, but has ſince been planted on the ſandy downs on the coaſt. Theſe plantations, beſides their convenience, are ſo thriving, that the practice is likely to be continued. Can I conclude this account without obſerving, that this rich and

[38] Two other ſorts may be collected from Galen; Arebo, and Daphnite. Larcher, Herod. vol. iii. p. 345.

[39] I uſe the term improperly, but Ceylon partakes of the nature of the continent—the coaſt is a level, the interior is high and table land. All above the mountains is ſtill poſſeſſed by the king of Candi; the Dutch had, and Engliſh have, only the coaſt.

[40] See Knox's Hiſtory of Ceylon, p. 16.

valuable

valuable iſland is now in the poſſeſſion of the Engliſh; and without a prayer, that the commerce may be conducted on more liberal principles, and the natives treated more generouſly by them than by their predeceſſors? The knowledge which the ancients had of this iſland is treated at large in the Sequel to the Periplûs; and it is to be hoped that the preſent governor, Frederick North, whoſe mind is ſtored with ancient knowledge, and whoſe attention is alive to modern information, will communicate his reſearches to the public.

I have only to add, that the Sanſkreet names of this ſpice are Savernaca and Ourana, as I learn from the Aſiatick Reſearches, vol. iv. p. 235.; and that Salmaſius mentions Salihaca as the Arabic appellation, which he derives from the Greek Ξυλικὴ, lignea, or woody (p. 1306.), but which, if I did not pay great reſpect to his authority, I ſhould rather derive from Salikè, the Greek name of the iſland in the age of Ptolemy.—I have now only to requeſt that this detail, too prolix for the work, may be accepted by the reader, not as the natural, but the claſſical hiſtory of cinnamon.

38. Κασσίτερος. *Tin.* P.

Tin is mentioned as an import into Africa, Arabia, Scindi, and the Coaſt of Malabar. It has continued an article of commerce brought out of Britain in all ages, conveyed to all the countries on the Mediterranean, by the Phênicians, Greeks, and Romans, and carried into the Eaſtern Ocean, from the origin of the commerce. It is only within theſe few years it has found its way into China in Britiſh veſſels, where it is now become an article of ſuch magnitude, as greatly to diminiſh the quantity of ſpecie neceſſary for that market.

39. Κατυ-

39. Καττυβρίνη, Πατροπαπίγη, Καβαλίτη. *Kattyburinè, Patropapigè, Kabalitè.* Peripl. p. 28.

Different ſpecies of nard. See Νάρδος. P.

40. Καυνάκαι απλοΐ ὐ πολλῦ. *Kaunakai.* P.

Coverlids plain, of *no great vlaue* (or, according to another reading, *not many*), with the nap on one ſide. Heſychius and Phavorinus, cited by Hudſon.

41. *Ceraunium.* D. A gem.

Salmaſius ſays there are two ſorts:

1. A pure chryſtal.
2. Another red, like a carbuncle.

He thinks the chryſtal to be the true ceraunium; and that Claudian is miſtaken when he writes,

Pyreneiſque ſub antris
Ignea fulmineæ legere Ceraunia nymphæ.

42. Κολανδιόφωντα. *Kolandiphonta.* P.

Large ſhips on the coaſt of Coromandel, in which the natives traded to Bengal and Malacca. They had veſſels alſo called ſangara, made of one piece of timber, which they uſed in their commerce on the coaſt of Malabar. The monoxyla of Pliny were employed in bringing the pepper down the rivers to the coaſt. Lib. vi. 23.

43. Κοράλιον. *Coral.* P.

44. Κοστος[41]. *Coſtus, Coſtum.* D. P.

Is conſidered as a ſpice and aromatic by Pliny, lib. xii. c. 12.

[41] It is worthy of remark, that in the enumeration of gifts made by Seleucus Callinicus to the Mileſians, there ſhould be this diſtinction:

Frankincenſe - -	10 talents.

It

It is called radix, *the root*, pre-eminently, as nard is ſtyled *the leaf*. Coſtus being, as we may ſuppoſe, the beſt of aromatic, *roots*, as nard or ſpikenard was the beſt of aromatic *plants*. This ſuppoſition explains a much-diſputed paſſage of Pliny. Radix et folium [42] Indis eſt maximo pretio: the (root) coſtus, and the (leaf) ſpikenard, are of the higheſt value in India. Radix coſti guſtu fervens, odore eximio, frutice alias inutili: the root of the coſtus is hot to the taſte, and of conſummate fragrance; but the plant itſelf, in other reſpects, without uſe or value. It is found at the head of the Pattalênè, where the Indus firſt divides to incloſe the Delta; of two ſorts, black and white, the black is the inferior ſort, and the white beſt. Its value is ſixteen denarii [43], about twelve ſhillings and eight pence a pound.—Thus having diſcuſſed the coſtus or root, he proceeds to the leaf or plant: De folio nardi plura dici par eſt; but of this hereafter. It is here only mentioned to give the true meaning of the paſſage.

This root is ſaid, by Salmaſius, to grow in Arabia as well as India; and I do not find that it has acquired any European name, though it was formerly much uſed in medicine, and called the Arabian, or true coſtus. It is confounded by Gothofred, firſt with coſtamomum, which he derives from Mount Amanus, and ſecondly, with carda-

Myrrh	- - -	1 talent.
Caſia	- - -	2 pounds.
Cinnamon	- - -	2 pounds.
Coſtus	- - -	1 pound.

The reaſon is evident; frankincenſe and myrrh were procurable in Arabia, which bordered on his own kingdom. Caſia, cinnamon, and coſtus, were Eaſt India commodities. See Chiſhull, Antiq. Aſiat. p. 71.

[42] But *the leaf* is applied pre-eminently to the betel in India to this day. See Herbelot in voce. Son nom le plus commun eſt Betré ou Betlé, dont le premier ſe prononce auſſi barra, qui ſignifie chez les Indiens, en general la feuille de quelque plante, et qui s'applique par excellence à la feuille de Tembul, en particulier.

Pliny has applied the leaf *par excellence* to the nard, and then confounded ſeveral properties of the betel with it. See Notes.

[43] The numbers in Pliny are dubious.

momum. (See Salm. p. 400. & ſeqq.) I have ſuppoſed that amomum, as it is found in cinn-amomum, carda-momum, and coſt-amomum, implies the warmth and gentle pungency of an aromatic; for the amomum itſelf, if we know what it is, is of a hot, ſpicy, pungent taſte. (Chambers's Dict. in voce.) But Salmaſius and Hoffman ſeem to trace it to a Greek origin (ἀμωμὸς, inculpatus), and to ſignify unadulterated. They apply it likewiſe to momia or mumia, becauſe the amomum was particularly uſed to preſerve the body from putrefaction. It was found in India and Syria, but the beſt in Arabia (imported?). The Arabian is white, ſweet, light of weight, and fragrant; the Syrian is heavier, pale, and ſtrong ſcented. Gothofred, from Iſid. xvii. 9. Dioſcorid. lib. i. c. 14. Plin. i. 2. and xii. 24. Dioſcorides ſays it grows in Armenia, Media, and Pontus, c. 14.; but the whole account is very dubious; all ſpeak of its warmth and pungency; but let us apply this to the coſtus, which, in regard to its unadulterated ſtate, and its qualities, is ſtill much queſtioned: its properties are—" I. Fragrance: Odorum cauſa unguentorumque " et deliciarum, ſi placet etiam ſuperſtitionis gratia emuntur quo- " niam thure ſupplicamus et coſto. Plin. xxii. 24. Coſtum molle " date et blandi mihi thuris odores. Ure puer coſtum Aſſyrium " redolentibus aris. Propert. lib. iv. Πλειςην εχων καὶ ηδειαν οσμην· " Dioſ.—II. Pungency; both coſtus and coſtamomum are ſaid to " be of a warm, pungent quality: Πλειςης δε της δριμειας και θερμης " μετεχει ποιοτητος και δυναμεως. Galen. Guſtu fervens, Pliny.—It is " mentioned in the Geoponica, as one of the ingredients for making " the ſpiced wine, called παναχειια. Lib. vii. c. 13. But the beſt " writers on the coſtus of the ancients think it is not aſcertained." F. F. Pſeudocoſtus naſcitur in Gargano Apuliæ monte.—Of the coſtus brought from the Eaſt Indies there are two ſorts, but ſeldom

it was Cyrênè in Africa, where it was ſo much a ſtaple commodity, that the Cyrenian coins were marked with the ſilphium. It is now brought from Siam and Sumatra; is uſed in medicine and coſmetics. See Chambers in voce, and Gothofred, who cites Columella, vi. 17. Iſid. xvii. 9. It is vulgarly called Gum Benjamin. Pliny mentions it inter eximia naturæ dona, xxii. 23.

49. Λέντια. *Linen, from the Latin lintea.* See Ιματισμός. P.

50. Λίβανος. *Frankincenſe*[45]. D. P.

51. Λίβανος ὁ περατικὸς. *From beyond the Straits of Bab-el-Mand-eb.* P.

A gum or reſin ſufficiently common in Europe ſtill; originally introduced from Arabia only, and uſed by the nations on the Mediterranean under the denomination of thus and libanus which are ſynonymous. Its name is derived from לבן, laban, white, Heb. and לובן, loban, Arabic, becauſe the pureſt ſort is white[46] without mixture. See Bochart, tom. i. p. 106. Hence libanus and the corrupt olibanum. M. Polo calls it *encens blanc.* Bergeron's Col. p. 153. It was chiefly brought from Hadramaut or Sagar, a tract of Arabia on the ocean. The beſt ſort is likewiſe in ſmall round grains called χόνδρος, from the Arabic כנדר, chonder. Bochart, ibid. But Niebuhr ſays, that the libanus of Arabia at preſent is greatly inferior to that brought from India, as being foul, mixed with ſand and ſtones; he adds alſo, that the plant which produces it, though cultivated at Keſchin and Schahr (Sagar) is not native, but originally from Abyſſinia. See Niebuhr. Arabia, tom. i. p. 202. ii.

[45] Olibanus, oleum Libani.

[46] It grows yellow by keeping. Dr. Burgeſs has many ſpecimens of Arabian libanus.

p. 131, in which opinion he is ſupported by Bruce. The Arabians paid a thouſand talents of frankincenſe by way of tribute to Perſia. Plin. xii. 17. Herodot. When Niebuhr was in Arabia, the Engliſh traders called the Arabian ſort incenſe of frankincenſe, and the Indian or better ſort, benzoin, and the worſt benzoin was eſteemed more than the beſt incenſe. The Arabs themſelves preferred the Indian to their own, and called it bachor Java, either becauſe it grew in that iſland, or was imported from Batavia. See alſo d'Anville, Georg. Anc. tom. ii. p. 223.

52. Λιθίας Ὑαλῆς πλείονα γένη καὶ ἄλλης Μυῤῥινῆς τῆς γενομένης ἐν Διοσπόλει. *Glaſs and Porcelane made at Dioſpolis.* P.

1ſt. Lithia Hyala. Several ſorts of glaſs, paſte, or chryſtal. See article Λιθία διαφανής.

2d. Λιθία Μυῤῥίνη. P.

Which Salmaſius ſays, ought always to be written morrina, not myrrhina, myrrina, murrhina, or murrina. And he maintains that it is certainly the Oriental porcelane. It is here evidently joined as the adjective to Λιθία, as it is afterwards (p. 28. Peripl.) mentioned with Λιθία ὀνυχίνη, and connected in a ſimilar manner, Λιθία ὀνυχίνη καὶ Μυῤῥίνη, where it is ſpecified as brought down from the capital of Guzerat, Ozênè, (Ougein,) to the port of Barygáza or Baroach. All this ſeems to confirm the opinion that it was porcelane procurable in India at that time, as it now is; and that it was brought into Egypt by the ſhips that went to India. But what is more extraordinary is, that it was imitated in the manufactories of Dioſpolis in Egypt, juſt as our European porcelane is now formed upon the pattern of the Chineſe.

But

But in oppoſition to this opinion, Mr. Dutens, under the article Sardonyx, ſuppoſes that ſtone employed and cut, to form the Murrhina, on account of its beauty, and the great number of ſtrata in a ſmall compaſs, that the Sardonyx was formed into ſmall vaſes, as well as various ſorts of agates, there can be little doubt; but why after cutting, it ſhould loſe the name of ſardonyx, and take that of murrhina, is ſtill to be explained; and how they ſhould be baked in Parthian furnaces, or imitated at Dioſpolis, muſt likewiſe be inquired. The beſt argument in favour of Mr. Dutens' opinion, is, the connecting it with *ὀνυχίνη* in the invoice of the Periplûs, *Λιθία ὀνυχίνη καὶ Μυῤῥίνη*, and Lampridius likewiſe ſays of Heliogabalus, as cited by Geſner, myrrhinis et onychinis minxit. Theſe inſtances are ſo ſtrong, that if the other qualities attributed to this precious commodity could be accounted for, and rendered conſiſtent, the ſuffrage of a writer ſo intelligent and well informed, ought to prevail. Geſner produces a variety of authorities from Jo. Frid. Chriſtius, which confirm this opinion of Mr. Dutens, or at leaſt prove it a foſſil. The principal one is from Pliny, xxxvii. 2, and xxxiii. proem. Chryſtallina et myrrhina ex eadem terra fodimus, ſo that it is poſitively aſſerted to be a foſſil from Karmania; while the colours aſſigned to it, of purple, blue and white, with the variegated reflexion from the mixture, ſuit much better with porcelane. Martial ſtyles it myrrhina picta, xiii. p. 110, and notices it as capable of containing hot liquors, a property in which it ſeems oppoſed to glaſs or chryſtal.

Si calidum potes ardenti murra Falerno
Convenit, et melior ſit ſapor inde mero.

The *ſapor* here, and the *odor* mentioned by others, ſuit the ſardonyx no better than porcelane; but the teſtimony of Propertius is

as

as direct to prove it factitious, as that of Pliny to prove it a foſſil.

Murreaque in Parthis pocula cocta focis, iv. 5. 26.

And to reſiſt this evidence, Chriſtius contends, that the Murrea are not the ſame as Myrrhina; but an imitation like the Dioſpolite manufactory. I am by no means qualified to decide in this diſpute, where the difficulties on either ſide ſeem unſurmountable; but as my own opinion inclines rather in favour of porcelane, I will ſtate my reaſon plainly, and leave the determination to thoſe who are better informed.

Porcelane, though it is factitious, and not a foſſil, is compoſed of two materials which are foſſil, the petuntze and the clay. The former, the Chineſe call the bones, and the latter the fleſh. The place of petuntze is ſupplied, in our European imitations, by flints reduced to an impalpable powder; and the vitrifaction of the petuntze or the flints in the furnace, gives to porcelane that degree of tranſlucency it poſſeſſes. The petuntze is ſuppoſed to be found of late in England. Now it is a well known fact, that the ancient compoſition of porcelane in China, was ſaid to be prepared for the ſon by the father, and to lie buried for ſeveral years before it was prepared for the furnace, and the inferiority of the modern porcelane, is thought, by the Chineſe connoiſſeurs, to ariſe from the neglect of this practice. May not this have given riſe to the opinion that the murrhina were a foſſil production?

Another conſideration ariſes from the words employed by Pliny to expreſs the murrhine veſſels, which are *capis* and *abacus*, ſignifying, if Hardouin be correct, literally, the cup and ſaucer, and the capis which was a veſſel uſed in ſacrifices, was regularly a vas fictile.

But

But the laſt circumſtance I ſhall mention is, the ſize of that murrhine veſſel mentioned by Pliny, which contained three pints (ſextarios). Can it be ſuppoſed that a ſardonyx was ever ſeen of this ſize? he adds indeed afterwards, amplitudine nuſquam parvos excedunt abacos, which, to make it conſiſtent, muſt be qualified with the exception of the former veſſel that contained three pints. He has other particulars which lead us again to porcelane, craſſitudine raro quanta dictum eſt vaſi potorio, and in another paſſage, humorem putant ſub terra calore denſari, which he certainly applies to the concoction of a foſſil, but which bears no little reſemblance to the maturing of the materials before mentioned.

After all, if it was a gem, it is aſtoniſhing that the ſardonyx ſhould be mentioned by no ancient author, as appropriated to this purpoſe. If it was factitious, it is equally ſtrange, that nothing ſtronger ſhould appear on that ſide of the queſtion, than the capis of Pliny. The diſtinction could not have been miſtaken. The country he aſſigns to the production, is Karmania, in the kingdom of Parthia, and that it came from Parthia [47] into Egypt, to the countries on the Mediterranean, and to Rome, ſeems evident from a variety of authorities; and that it might well do, if we conſider that Parthia communicated with India by means of the Perſian Gulph, and poſſibly on the north with China [48] itſelf, by means of the caravans. The mention of Karmania by Pliny, as the country where the murrhina were obtained, favours the ſuppoſition of procuring theſe veſſels from India;

[47] The kingdom, not the province, as we may ſee from a former citation noticing Karmania.

[48] That there was an intercourſe with the Seres on the north of the Himmalu mountains, and that exchange of commodities took place at ſome frontier, like that between the Ruſſians and Chineſe at Kiatcha, is evident from Ptolemy, Pliny, and the Periplûs. Whether the Seres were Chineſe, or an intermediate tribe between India and China, is not material in the preſent inſtance.

for

for the communication of Karmania with Scindi and Guzerat is almoſt immediate, and certainly prior to the navigation from Egypt to that coaſt. But in Guzerat they were obtained, when the author of the Periplûs was employed in that trade; and their arrival at the market of Baroach, from the interior of India, may induce us to ſuppoſe, that they came into India from the north.

The immenſe value of theſe veſſels at Rome might well ariſe from their ſcarcity. They were firſt ſeen there in the triumphal proceſſion of Pompey; and it muſt be obſerved that Pompey returned from the ſhores of the Caſpian Sea. They were afterwards introduced into uſe at the tables of the great, but of a ſmall ſize and capacity, as cups for drinking. Afterwards one which held three ſextarii or pints, was ſold for ſeventy talents[49]; and at length Nero gave three[50] hundred for a ſingle veſſel. The extravagance of the purchaſer might, in this inſtance, enhance the price, but the value of the article may be better eſtimated by the opinion of Auguſtus, who, upon the conqueſt of Egypt, ſelected out of all the ſpoils of Alexandria a ſingle murrhine cup for his own uſe. Now, therefore, if the murrhine was porcelane, it may be a piece of information acceptable to our fair countrywomen, to know that Cleopatra did not indeed ſip her tea, but drink her Mareotick wine out of china.

I have not been able to conſult the work of Chriſtius, but take the account of his argument from Geſner, and I refer the reader for further information to Geſner in voce, to Chambers's Dictionary, to Salmaſius, Plin. Exercit. and to an expreſs diſſertation in the Volumes of the Academy of Belles Lettres, which I have formerly ſeen, but have not now an opportunity of conſulting. I recollect that

[49] £.13,562.
[50] £.58,125.

The ſums ſeem as immoderate for a cup of ſardonyx as for porcelane.

it

it is in favour of the opinion, that murrina and porcelane are the ſame.

53. Λιθία διαφανὴς. P.

A tranſparent ſubſtance of ſtone or pebble, but it is probably here the glaſs made of ſtone as clear and bright as chryſtal, and the ſame as Ὑαλὴ, Hyalè mentioned before. Salmaſius (p. 1096.) has a very curious quotation from the Scholiaſt on Ariſtophanes ad Nubes, Act ii. ſcene 1. "We call Hyalos (he ſays) a material made of a cer-
" tain plant burnt, and waſted by fire ſo as to enter into the compo-
" ſition of certain [glaſs] veſſels. But the ancients appropriated the
" term hyalos to a tranſparent ſtone called kruon, or chryſtal."—
This perfectly accords with the manufacture of glaſs, compoſed of ſand, or flints, and the aſhes of a plant called kali or vitraria in Narbonne. Salm. ibid. and Chambers in voce. But glaſs has its name from glaſtum [51] or woad, *the blue dye*, becauſe common glaſs was of that colour, but the tranſparent ſtoney glaſs [flint glaſs] here mentioned ſeems to take its name [διαφανὴς] tranſparent, and [Ὑαλὴ] chryſtalline, from its ſuperior purity and imitation of the chryſtal. The whole paſſage in the Scholiaſt is intereſting, and worth conſulting. Nub. act ii. ſcene 1. l. 766. Τὴν Ὑαλου λίγεις.

" The hyaloe or chryſtal is formed circular and thick for this pur-
" poſe [the purpoſe of a burning glaſs], which being rubbed with
" oil and warmed, they bring near the wick of a lamp and light
" it :" [it was rubbed with oil probably to clean it, but why warmed

[51] See Voſſius ad Melam, Varior. ed. 1722, who cites Pliny, lib. xxii. c. 1. Simile plantagini glaſtum in Gallis, quo Britannorum conjuges nuruſque toto corpore oblitæ. Voſſius adds, apud Cambro-Britannos iſatidis proventus glas appellatur, et cæruleum colorem. Herba iſatis is woad.

does not appear.] " Homer knew nothing of the chryſtal, but " mentions amber :" [true, for with Homer κρύσταλλος is always ice.]

Hence it appears that chryſtal was known to Ariſtophanes, and the application of it to the purpoſes of a burning glaſs; that glaſs was known in the time of the Scholiaſt, and that Homer knew nothing of either. The uſe of a pebble or chryſtal, however, to kindle fire, is known at leaſt as early as the writings of Orpheus περὶ λίθων. And if the writings attributed to Orpheus be really the work of Pythagoras, or a Pythagorean, as Cicero ſuppoſes, De Nat. Deorum, the knowledge of this property is ſtill very old. But Tyrwhitt has overſet all the antiquity of this Orpheus, and brings the poem Περὶ λίθων down to the lower empire—to Conſtantius, or even lower. See Præf. p. 10. et ſeq.

Why glaſs was ſo late before it was introduced to the knowledge of the Greeks and Romans, or other nations on the Mediterranean, ſeems extraordinary; but De Neri (Art. de la Verrerie, Paris, 1752) informs us, that glaſs is not mentioned in the Old Teſtament, and appears in the New only, in the epiſtles of St. Paul, St. James, and the Revelations; that of the Greeks, Ariſtotle is the firſt who makes expreſs mention of it, and aſſigns the reaſon why it is tranſparent, and why it will not bend, but in a dubious paſſage; in Rome it was but little known before the year 536, U. C. and was not applied to the uſe of windows till near the reign of Nero. Seneca, Ep. xc. This ſeems the more extraordinary as the art of making glaſs was known in Egypt in the earlieſt times. The mummies of the Catacombs near Memphis are ornamented with glaſs beads; and it has lately been diſcovered that the mummies of the Thebaid are decorated with the ſame material; which carries the invention much higher, poſſibly

to

to 1600 years before our era (Ripaud's Memoir). If this be a fact, we arrive at the Dioſpolis of Upper Egypt, the Thebes of Homer for the origin of the invention, but the Dioſpolis of the Periplûs is in the Lower Egypt on the Lake Menſaleh, though the name and ſite is much diſputed, as we learn from d'Anville, (Egype, p. 92,) but at Tennis on that Lake, the French found remains of brick, porcelane, pottery, and glaſs of all colours, (Memoirs, p. 223,) and at the Lower Dioſpolis, we find the ſame ſubſtances noticed by the Periplûs with the addition of wine, dipſe, and an imitation of the murrhine veſſels. Strabo informs us, that he converſed with the manufacturers of glaſs at Alexandria, who told him that there was a hyalite earth; which of neceſſity entered into their compoſitions of a ſuperior ſort, and particularly in the coloured glaſs, but that ſtill greater improvements had been made at Rome, both in regard to colours and facility of operation (lib. xvi. p. 758.). The ſame manufacture was continued afterwards at Tyre and Berytus; and at Tyre it was found by Benjamin of Tudela, as late as the year 1173. (Bergeron, p. 17.) At Rome it was certainly known before the ſecond Punick war, becauſe Seneca mentions ruſticitatis damnant Scipionem quod non in Caldarium ſuum ſpecularibus diem admiſerit, but this was in the Bath or Sudatory; in houſes it was introduced later, vitro abſconditur Camera, Ep. 86, et quædam demum noſtra memoria prodiſſe ſcimus ut ſpecularium uſum perlucente *teſta* clarum tranſmittentium lumen; but *teſta* does not quite expreſs *glaſs*. Martial mentions glaſs applied to the hot-houſe or green-houſe, lib. 8; and drinking glaſſes he calls chryſtalla (lib. x. 59, Ed. Fitzger.). Pliny alſo writes, maximus tamen honos eſt in candido tranſlucentibus, quam proximâ chryſtalli ſimilitudine, uſus vero ad potandum argenti metalla et auri pepulit. Lib. xxxvi. 26.

From which we learn, that the Romans uſed drinking glaſſes as we do, in preference to gold or ſilver, and that the material was not *vitrum*, but the white flint glaſs like chryſtal, as ours is. Gibbon has obſerved, that Auguſtus knew not the comfort of clean linen or glaſs windows, but glaſs windows were within a century after his time adopted in Rome. In England we are indebted to Theodorus, archbiſhop of Canterbury, who introduced glaſs windows, muſic, geometry, and claſſical learning into England about the year 670. Beda, Ec. Hiſt. lib. iv. c. 2.

That clear or flint glaſs aſſumed its name from Ὑαλη, chryſtal, is ſtill more apparent from a paſſage of Diodor. Sic. lib. ii. p. 128. ed. Weſſel. where mention is made of both ſorts, the factitious and native Ὑελον, as he writes it. The glaſs coffin of Alexander is called Ὑαλίνη, by Strabo, lib. xvii. p. 794. See Herod. iii. p. 206. et Weſſel. not. et Diod. ii. p. 15.

54. *Λίθος καλλεανὸς. καλλαϊνὸς.* P. *Callain Stone.*

The Lapis Callais or Callainus of Pliny is a gem of a pale green colour found in Caucaſus, Tartary, and the beſt ſort in Karmania; it is called an emerald by Ramuſio, and it was poſſibly one of thoſe ſubſtances which Dutens, ſays the ancients, miſtook for the emerald, and which he calls Peridot, Spath, Fluor, and prime d'Emeraude, the diſtinctions of which are attended to by few, except jewellers or collectors; others think Callais and Callainus two diſtinct ſtones; the Peridot is a pale green, inclining to yellow. Id.

Salmaſius writes it Callinus, and ſays it may be a pebble or agate, incloſed in another [n], and that it is looſe and rattles; this Pliny calls

[n] But he mentions it as a topaz, and ſays, there are topazes of two different colours; if blue, why not a turquoiſe? which is ſtill a favourite ſtone in the Eaſt.

Cytis, xxxvii. 56. Hard. Cytis circa Copton naſcitur candida, et videtur intus habere petram quæ ſentiatur etiam ſtrepitu.

55. Λίθος ὀψιανὸς. P. *Opſian Stone.*

Probably ſerpentine or hæmatite, in the opinion of Dr. Burgeſs. Salmaſius objects to Pliny for calling it opſidian, or ſaying it was diſcovered by Opſidius. In Greek it is always opſian, and is a green ſtone very dark, approaching to black. It was found in the iſlands of Ethiopia; and from taking a high poliſh was uſed by the emperor Domitian to face a portico, ſo that from the reflection he might diſcover if any one was approaching from behind.

The opſidian ſtone, mentioned by Pliny, is very dark but tranſlucent, and a factitious ſort of it which he likewiſe notices, ſeems very much to reſemble the material of which our brown or red tea-pots are compoſed. Totum rubens, atque non tranſlucens, hæmatinon appellatum. See diſcourſe in the Memoirs of the Academy of Sciences. The ſpecimens of this ſtone, which I have ſeen, are ſo dark that the green caſt can only be diſcovered by holding them in a particular poſition. The cloſeneſs of their texture ſeems to admit of any degree of poliſh that the artiſt may be diſpoſed to give them.

The ſpecimen which I ſaw was brought from Egypt by a Gentleman who had viſited the country: it was eſteemed ſuch in Egypt, and acknowledged for opſian by ſeveral of the moſt curious obſervers at Rome; and it exactly anſwers the deſcription of Iſidorus, adduced by Hardouin on this paſſage: eſt autem niger, interdum et *virens*, aliquando et tranſlucidus, craſſiore viſu. And again: obſidius lapis niger eſt, tranſlucidus et vitri habens ſimilitudinem. Iſidor. lib. 16. Orig. cap. 15. and cap. 4. That opſian and obſidian have been confounded,

founded, or applied to different ſubſtances, may be allowed; but the opſidian of Pliny came from Æthiopia, and ſo did the opſian of the Periplûs; and whatever be the name, the ſame foſſil ſeems to be intended. How it may be applied by others, concerns not the preſent queſtion; and if the etymology be Greek (from ὄπτομαι or ὄψις), it might be applied to any poliſhed ſtone which reflects images. It is uſed by Orpheus under opallius, lin. 4. in what ſenſe I pretend not to determine; but his claſſing it under the opal, which is clouded, and ſpecifying its pitchy colour (ᾧ πίτυος δάκρυσι λιθέμενον ὀψιανοῖο) and ſtone-like appearance, petrified, as he ſuppoſed, from the exudation of the pine, makes me ſuppoſe it the ſame as Pliny deſcribes, when he mentions the imitations of it and the ſtone itſelf: In genere vitri et obſidiana numerantur, ad ſimilitudinem lapidis quem in *Æthiopia* Obſidius invenit, nigerrimi coloris, aliquando et tranſlucidi craſſiore viſu, atque in ſpeculis parietum pro imagine umbras reddente. M. Dutens (p. 66.) ſays, it is a volcanic glaſs, ſuch as is found about Mount Etna and Mount Veſuvius; but inſtead of ſolving the difficulty, about which, he ſays, ſo many learned men have diſputed in vain, this only adds to it; for if it was found in Italy and Sicily, why ſhould it be ſought for in Ethiopia, almoſt at the mouth of the Red Sea, and imported from Egypt at a prodigious expence?

56. Λύγδος. *Lygdus.* P.

A beautiful white marble, or rather alabaſter, uſed to hold odours; Ramuſio. Salmaſius ſays, an imitation of this alabaſter [11] was formed of Parian marble, but that the beſt and original lygdus was

[11] Unguenta optime ſervantur in alabaſtris. Plin. lib. xiii. p. 3.

brought

brought from Arabia, that is, as noticed in the Periplûs, from Mooſa. Salm. p. 559.

57. Λύκιον. *Lycium.* P.

A thorny plant, ſo called from being found in Lycia principally. A juice from which was uſed for dying yellow, mentioned by Pliny and Dioſcorides. The women alſo, who affected golden locks, uſed it to tinge their hair. Salm. p. 1164. Why this ſhould be ſought in Scindi, if it was found in Lycia, does not appear. It is found now in the ſhops by the name of the yellow-berry, box thorn, grana d'Avignon. Dr. Burgeſs. Lycium, in Pliny, is a medicine derived from the Garyophyllon, lib. xii. c. 15. Hardouin, who adds Lycium porro quid ſit ignorari etiam a peritis herbariis pronunciat anguillara, lib. de Simplic. pars iii. p. 62. Nos Cluſio credimus eſſe Hacchic Goanorum.

58. Λωδικες. *Lodices.* P.

Quilts or coverlids.

ὑ πολλαὶ ἁπλοῖ χ᾽ ἐντόπιοι.

Coverlids plain and of the country manufacture at Mooſa.

M

59. Μαργαρίται, p. 84. D. P.

Pearls, fiſhed for near Cape Comorin, where the fiſhery ſtill continues, or at the Lackdive Iſlands, formed a great article of commerce on the coaſt of Malabar.

60. Μαλάβαθρον.

60. Μαλάβαθρον. *Malábathrum.* D. P. *Betel.*

In order to avoid the confuſion of ancient authors, we muſt conſider this article under two heads:

Firſt, as an Unguent, Odour, or Perfume;

Secondly, as the Betel.

Firſt, as an unguent or perfume, it is certainly aſſumed by Horace:

Coronatus nitentes
Malobathro Syrio capillos. Hor. lib. ii. ode vii. 8, 9.

and by Pliny[54] when he makes it, with all the fragrant odours of the Eaſt, enter into the royal unguent of the kings of Perſia. (Lib. xiii. c. 2.) And again (lib. xii. c. 12, or 26 Hardouin,) where he mentions the nard of Gaul, Crete, and Syria; the laſt agreeing with the Syrian odour of Horace, and almoſt aſcertaining the error of confounding ſpikenard with the betel. So likewiſe (lib. xii. c. 59.) Hard. Dat et malobathron Syria ex qua exprimitur oleum ad unguenta; but in the ſame chapter he ſays, ſapor ejus nardo ſimilis eſſe debet ſub linguâ; and (lib. xxiii. c. 48. Hard.) oris et halitûs ſuavitatem commendat linguæ ſubditum folium: in which ſenſe, as Dioſcorides alſo teſtifies, it is a maſticatory, and not an unguent. Added to this, he applies the titular diſtinction of hadroſphærum, meſoſphærum, and microſphærum, to the ſpikenard (lib. xii. 26. Hard.), which Salmaſius, Matthioli, and almoſt all the

[54] It appears by Pliny, lib. xiii. c. 2. that almoſt all the fragrant odours of the Eaſt entered into the compoſition of their unguenta. In the royal Perſian unguent no leſs than twenty-ſix odours are enumerated, and among them the malobathron, which is not ſo properly an odour as a ſtimulant, if it be the betre. But it is frequently confounded with the ſpikenard, the firſt of odours, which is preeminently called folium, or *the* leaf, in oppoſition to coſtus, or *the* root. But the betel-nut being wrapt in the arecka *leaf* has probably given riſe to the miſtake. See Pliny, lib. xii. c. 12. where the hadroſphærum, meſoſphærum, microſphærum—all diſtinctions of the betel, are falſely applied to the ſpikenard.

commen-

commentators, agree in aſſigning ſpecifically to the betel; and to the betel, betre, or petros, they are applied in the Periplûs. (p. penult.) The error of Pliny, and his fluctuation in making it both an unguent and a maſticatory, ariſes from his conſidering the ſpikenard to be *the leaf*, κατ' ἐξοχὴν (which it is not, but a root), and not conſidering, or not knowing, that the betel is, above all others, *the leaf*, uſed with the areka-nut, and the conſtant maſticatory of the Orientals from Malabar to Japan.

Secondly, that it is a maſticatory is confirmed by Dioſcorides; for he ſays (ὑποτίθεται δὲ τῇ γλώσσῃ πρὸς εὐωδίαν στόματος), it is placed under the tongue to ſweeten the breath, and it has (δύναμιν τίνα εὐστομαχωτέραν) the virtue of ſtrengthening the ſtomach. If any native of the Eaſt were at this day aſked the properties of betel, no doubt he would ſpecify theſe two particulars above all others. But it ſhould ſeem that Dioſcorides was aware of the confuſion cauſed by miſtaking the nard for the betel; for he commences his account by ſaying, that ſome believe the malabathrum to be *the leaf* of the nard, deceived by the ſimilarity of the odour; but the fact is far otherwiſe. (See Matthioli, p. 40.)

The author of the Periplûs knew that Petros was the leaf, and that when the whole compoſition was made up together, it was called Malabathrum; for he mentions the method of obtaining it by the Sêres from the Sêſatæ, and their exportation of it again. (p. ult.) We know likewiſe that the procuring it at the extremity of the Eaſt, is conſonant to modern obſervation; for though it is uſed in India, it is indiſpenſable in all ceremonies in Ava, Pegu, China, and the iſlands of Java, Sumatra, &c. It is now well known to conſiſt of the areka-nut, the betel-leaf, and a mixture of lime from ſea-ſhells,

and ſometimes with the addition of odoriferous drugs. The areka-nut has the appearance of an oblate nutmeg, hard as horn, and when cut, reſembling the nutmeg in its mottled appearance. Dr. Burgeſs informs me, that the unripe nutmeg is ſometimes preſſed, and an aromatic liquid procured, fragrant in the higheſt degree, which perhaps may have ſome relation to the perfumed unguent of the ancients. The betel is a ſpecies of the pepper-plant, and the lime is called chinam, the uſe of which turns the teeth black; and black teeth conſequently, from the univerſality of the practice, are the ſtandard of elegance in all thoſe countries where the uſage prevails. For the natural hiſtory of the ingredients, and the ceremonies attending the cuſtom, I refer to Sir G. Staunton's Chineſe Embaſſy, vol. i. 272.; Mr. Marſden's Sumatra, p. 242.; and Mr. Turner's Embaſſy to Thibet, pp. 285. 343.

The name of this maſticatory varies in different countries, but its Arabick name is Tembul, Tembal, or Tambal; and from tamala, added to betrè or bathra, tamala-bathra is derived, and the malá-bathra of the ancients, according to the opinion of Salmaſius.—"But Stephens (in voce) gives a different etymology: Ferunt apud "Indos naſci in ea regione quæ Malabar dicitur, vernaculâ ipſorum "linguâ Bathrum, ſive, Bethrum appellari, inde Græcos compoſita "voce nominaſſe Μαλαβάθρον." F. F. What adds to the probability of this is, that the coaſt was called Malè, till the Arabs added the final ſyllable. And let it not be thought fantaſtical, if we carry our conjectures farther eaſt—to the country of the Malays, in the Golden Cherſoneſe; for in that part of the world the cuſtom is far more prevalent, and there the beſt ingredients are ſtill procured. The Malays were not unknown, by report at leaſt, to the Greeks; for Ptolemy

Ptolemy has a Malai-oo-Colon (Μαλαίϖ κῶλον ἄκρον, p. 176, not far from the Straits of Malacca, the country of the Malays.

From the practice of the natives, another circumſtance occurs worthy of remark; for it is ſaid, "Sinæ in mutuis viſitationibus "folia betel manu tenent, ac cum Areka et calce in patinis ligneis "in benevolentiæ ſignum offerunt hoſpiti; dum utuntur, primo "parum Arekæ mandunt, mox folium betel calci illitum, *exemptis* "*prius nervis* ungue pollicis, quem propterea longum atque acutum "habent." Nieuhoff, pars ult. Legat. Batav. p. 99. F. F.—I owe this curious paſſage to the ſuggeſtion of Dr. Falconer, and I cannot help thinking that it correſponds with the expreſſion in the Periplûs, ἐξινιάσαντες καλάμους τοὺς λεγομένους Πέτρους; ex arundinibus illis quas petros appellant *nervis fibriſque extractis*; though applied to the making up of the compoſition, rather than the uſe of it.

The account of the ingredients muſt be left for the natural hiſtorians to develope; but the claſſical hiſtory of them, ſuch as I have been able with the aſſiſtance of my friends to collect, has been drawn from Dioſcorides, Pliny, Matthioli, Salmaſius, and the other authorities cited, with much labour and attention; and if it contributes to remove the obſcurity in which the queſtion was involved, let it not be received as a tedious diſcuſſion, but as the effort of an author, who was engaged in the inquiry, before he was aware that an acquaintance with natural hiſtory would become ſo material a part of his duty.

62. Μάκειρ. *Macer.* P.

An aromatic from India; the bark red, the root large. The bark uſed as a medicine in dyſenteries. Plin. xii. 8. Salm. 1302.

63. *Margaritæ.* D. P. *Pearls.*

The Pearl Fiſhery is mentioned in the Periplûs, both at Bahrein in the Gulph of Perſia, and at the Iſland of Ceylon; but I am obliged to Mr. Falconer for pointing out "the authority of Pliny, "lib. ix. 35. or 54 Hard. and lib. vi. 22. or 24 Hard.; the former "of which is of importance, as marking out not only the fiſhery "at Ceylon, but at Perimoola, and the Sinus Perimoolus." F. For the Perimoöla of Ptolemy is not far from the Straits of Malacca, and approaches (though not nearly) to the Sooloo Fiſhery of Mr. Dalrymple. Whether pearls are ſtill taken in the Gulph of Siam or Cambodia, I am not informed, but they might well be brought thither from Borneo; and the information is highly intereſting. In the ſame paſſage it is noticed by Pliny: Principium ergo, culmenque omnium rerum pretii, Margaritæ tenent. But it is not true that the pearl ſold higher at Rome than the diamond; for, lib. xxxvii. c. 4. the diamond has the higheſt value; the pearl, the ſecond; and the emerald, the third.

64. *Marucorum Lana.* D. *Wool of Marucori.*

The text is corrupt, Ramuſio joins it with the following article, Fucus, which he reads Marucorum Succus; but what it means is not eaſily diſcoverable. Dr. Falconer, with great appearance of probability, ſuppoſes it to be the wool of the Thibet ſheep, of which ſhawls are made.

65. Μάχαιραι. P.

Knives or canjars worn at the girdle.

66. Μιλιέφθα.

66. Μελιέφθα χαλκὰ. P.

Braſs [55] or copper, prepared, as Ramuſio ſays, for veſſels of cookery. But rather for ornaments of women, as bracelets, anklets, and collars. No uſage of Μελιέφθα occurs elſewhere; but metals were prepared with ſeveral materials to give them colour, or make them tractable or malleable. Thus χολόβαφα in Heſychius was braſs prepared with ox's gall to give it the colour of gold, and uſed like our tinſel ornaments or foil for ſtage dreſſes and decorations. Thus common braſs was neither ductile nor malleable, but the Cyprian braſs was both. And thus, perhaps, braſs, μελιέφθα, was formed with ſome preparation of honey. Pliny uſes coronarium poſſibly in reference to the ſame application of it as Heſychius mentions, and ſeems to uſe Cyprium in the ſenſe of copper. Cyprium regulare is the beſt copper, and every metal is called regulare when purified, omne, purgatis diligentius igni vitiis, excoctiſque, regulare eſt. And again Cyprium tenuiſſimum quod coronarium vocant, xxxiii. 9.

67. Μέλι καλάμινον τὸ λεγόμενον σάκχαρι. D. P.

Honey from canes. *Sugar.*

In Arabic, ſhuker, which the Greeks ſeem firſt to have met with on the coaſt of Arabia, and thence to have adopted the Arabic name. It is here mentioned on the coaſt of Africa, where the Arabians likewiſe traded, and either imported it themſelves from India, or found it imported; it was evidently not found in that age growing in Africa. The Sanſkreet name of ſugar is ich-ſhu-caſa, and from the two middle ſyllables the Arabic ſhuka, or ſhuker. Aſ. Reſearch. iv. 231. See Du Cange, article Cannamele, Cannæ Mellis, mentioned

[55] This article is very dubious.

by

by Abbertus Aquenſis, William of Tyre, and others, as introduced from the Eaſt into Cyprus, Sicily, &c. in their age.

68. Μελίλωτον. *Honey Lotus.* P.

The lotus or nymphæa of Egypt. The ſtalk contains a ſweet and eatable ſubſtance, conſidered as a luxury by the Egyptians, and uſed as bread; it was ſometimes carried to Rome, and the Periplûs makes it an article of importation at Barygáza. It appears alſo to have been uſed as proviſion for mariners; and if this was the favourite bread of Egypt, in preference to grain, Homer might well ſpeak of it as a luxury and delicacy; but his lotus is generally ſuppoſed to be the fruit of a tree, by our African travellers. Authors differ, ſome aſſerting that it is ſtill common in the Nile, others ſaying that the lotus now found there has neither pulp nor ſubſtance.

69. Μέταξα. See Νῆμα Σηρικὸν. D. P.

70. Μακρότυ θυμίαμα. D. P.

An incenſe called macrotus or macroton.

71. Μολόχινα. P.

Coarſe cottons of the colour of the mallow. Others read Μοναχὴ, either ſingle threaded or of one colour.

Coarſe cotton dyed of a whitiſh purple, and therefore called molochina from Μολόχη, *mallows*. Wilford, Aſiat. Diſſertation. vol. ii. p. 233.

Paolino interprets Molochina, tele finiſſime dipinti e richamente, p. 95. i. e. chintz. Muſlins are ſaid to derive their name from Moſul, becauſe they were brought from thence by caravans into Europe.

(Marco

(Marco Polo, lib. i. c. 6.) But there is a diſtant reſemblance between Molochina and muſlins, and the Greeks had no ſoft ſound of ch. If there is any name in the native language ſimilar to either, we ought rather to ſeek for an Oriental derivation than a Greek one. At the ſame time it may be conſidered, that *purple* cottons might have as general a ſale formerly, as *blue* Surats have now.

72. Μόλυβδος. *Lead.* P.

73. Μοτώ. P.
A ſpecies of cinnamon. See Κασσία.

74. Μύρον. D. P.
Myrrh or oil of myrrh [56].
A gum or reſin iſſuing from a thorn in Arabia, Abyſſinia, &c. Bruce has given an account of the plant; he ſays it is originally from Africa, and that the Arabian myrrh is ſtill an inferior ſort. See Bruce, Chambers, and Salmaſius.

75. Μυῤῥίνη. See Λιθία Μυῤῥίνη.
Porcelane. See Geſner and Chambers in voce.

N

76. Νάρδος. D. P. *Nardi Stachys*, *Nardi Spica*, in the Digeſt. *Spikenard.*
This article appears under another form, and as if it were a dif-

[56] The African is beſt; the Abyſſinian, Arabian, and Indian, worſt. Dr. Burgeſs.

ferent

ferent article in the Digeſt, No. 3; the Nardi Stachys is No. 5, but under No. 3 we read

Folium
1. Pentaſphærum.
2. Barbaricum.
3. Caryophyllum.

The two firſt of which may be interpreted in conformity to the authorities which follow: 1. Folium Pentaſphærum, Betel. 2. Folium Barbaricum, ſpikenard; but the third is the *Clove*, and is not related to the other two folia or leaves, unleſs it were introduced into the reſcript of the Digeſt, from the cuſtom-houſe at Alexandria, becauſe it was a compound of φυλλον, a leaf. Caruo-phullon, the *nut leaf*, is a name applied to the pink flower, becauſe the ſheath which encloſes the flower is ſcolloped and jagged like the ſheath of the nut. Whether this was transferred to the clove itſelf, on account of the angular points at the head of the *clove*, or nail; or, whether to the plant, I am not able to determine. (See article Caryophyllon); but Νάρδος is the ſpikenard called Folium Barbaricum, becauſe it was obtained at Barbarikè, the port of Scindi; and Folium Gangiticum, becauſe it was likewiſe procured at the Ganges, that is in Bengal; Νάρδος γαπανικὴ alſo, as it appears in the Periplûs (p. 32.), by the general conſent of the commentators, is read, Νάρδος Γαγγιτικὴ, and confirmed by the Periplûs itſelf, p. 36.

No Oriental aromatic has cauſed greater diſputes among the critics, or writers on Natural Hiſtory, and it is only within theſe few years that we have arrived at the true knowledge of this curious odour, by means of the inquiries of Sir William Jones and Dr. Roxburgh.

Their account is contained in the fourth volume of the Aſiatic Reſearches, and Dr. Roxburgh was ſo fortunate at laſt as to find the plant in a ſtate of perfection, of which he has given a drawing that puts an end to all controverſy on the ſubject.

The nard has the addition of ſpike from the Latin ſpica, an ear of wheat, which, according to Dr. Roxburgh's drawing, it perfectly reſembles. And this adjunct is found alſo in its Arabic name, ſumbul; and in its Shanſkreet appellation, Jatámánsí; as alſo its Perſic title khûſhah, all ſignifying *ſpica*.

Sir William Jones, Aſiat. Reſ. iv. 117, ſays, it is a native of Budtan, Nepal, and Morang; and that it is a ſpecies of Valerian. It is remarkable that he had himſelf ſeen a reſemblance of it in Syria, as the Romans or Greeks mention Syria as one of the countries where it is found; but Ptolemy gives it its true origin in theſe tracts of India. A ſpecimen was brought down to Calcutta from Boudtan at the requeſt of Sir William Jones, and the agents of the Deva Raja called it pampi; but it was not in flower. Some dried ſpecimens of it looked like the tails of ermines, but the living ones, as Dr. Roxburgh afterwards found, riſe from the ground like ears of wheat. It anſwers the deſcription of Dioſcorides. It is weaker in ſcent than the Sumbul ſpikenard of Lower Aſia when dry, and even loſt much of its odour between Budtan and Calcutta. The odour is like the ſcent of violets; but the living plant is forbidden to be brought out of Boudtan. It was, however, procured by the intervention of Mr. Purling, the Engliſh reſident; and was at laſt received in its perfect form by Dr. Roxburgh, who has deſcribed it botanically. As. Reſ. iv. 733.

In the age of the Periplûs it was brought from Scindi, and from the Ganges; which, according to Sir William Jones, we ought to

conclude would be the natural port for it, as coming from Boudtan. This authorizes the change of reading from γαπανικὴ, [gapanika,] to γαγγιτικὴ, [gangitikà,] more eſpecially as it is mentioned at the Ganges. Some fanciful inquirers might think they had found the mention of Japan in this paſſage.

We ought not to omit ſome particulars from Pliny which are remarkable. He deſcribes the nard with its ſpica, mentioning alſo that both the leaves and the ſpica are of high value, and that the odour is the prime in all unguents. The price an hundred denarii for a pound. And he afterwards viſibly confounds it with the malobathrum or betel, as will appear from his uſage of hadroſphærum, meſoſphærum, microſphærum, terms peculiar to the betel.

Hoffman in voce Foliatum, writes, Folium cataſphærum eſt Folium Malabathri quod inde σφαιραι, *i. e.* pilulæ conficerentur. Folium vero Barbaricum, id quod Indicum, Græci recentiores nominarunt quod ex India deferretur per Barbaricum Sinum. F. F.— But it is not the Barbaricus Sinus on the coaſt of Africa that is meant, but the port Barbarikè in the Delta of the Indus. There the Periplûs finds the ſpikenard, which is the folium Indicum. Folium cataſphærum, hadroſphærum, &c. is the betel-leaf. Hoffman adopts Salmaſius's opinion in regard to the miſtake of Pliny: he ſeems to think that the malobathrum, as well as the folium, was confounded with the ſpikenard. If ſo, the malobathrum Syrium of Horace is the unguent of ſpikenard, which, according to Sir W. Jones, is found in Syria as well as in India.

The characteriſtic name of the nard is folium [17], *the* leaf, pre-

[17] Salmaſius, p. 1065, is clearly of opinion, that Pliny is regularly miſtaken in applying folium to nard. He ſays it is always peculiar to malobathrum betel.

eminently

eminently in contradiſtinction to coſtus, *the* root, both as the prime odours of their two ſorts, the root and the leaf.

Dr. Falconer has juſtly cautioned me to be ſure that the nard of of Pliny is *the leaf*. I know no more of natural hiſtory than I have obtained from the authorities here cited; but that Pliny mentions both the ſpica and the folium of the nard, is certain; and by his expreſſions I underſtand, that what we now know to be the *root*, he ſuppoſed to be the *growth*. *Cacumina* in ariſtas ſe ſpargunt, aſſuredly expreſſes ſomething above ground; ideo gemina dote nardi ſpicas ac folia celebrant, by which we muſt underſtand that cacumina and ſpicæ are identified. But that Pliny was miſtaken, and that the ſpica was really the root, cannot be doubted, after the account that Dr. Roxburgh has given. It is clear alſo from the authorities adduced by Dr. F. that the ancients were well informed of this. "In "one of the receipts for the Theriaca Andromachi, Ναρδοιο τε ριζαν "Ινδης. Ναρδε ϛαχυς, η ριζα ταυτης θερμαινει μεν κατα πρωτην αποϛασιν. "Æginet. lib. vii. Galen ſpeaks of it as a root: εκ τουτων δε η ριζα "συγγινομενη δυναμεων. And Arrian: εχειν δε την ερημον ταυτην τε "Ναρδε ριζαν, πολλην τε κ᾽ ευοσμον, κ᾽ ταυτην συλλεγειν τες Φοινικας. "And Galen, lib. xii. de Antidotis, c. 14. εφεξης δε της προγεγραμ- "μενης ο Ανδρομαχος Ινδικην Ναρδον κελευει βαλειν, ηνπερ κ᾽ ϛαχυν ονο- "μαζομεν Ναρδον, κ᾽ τοι ριζαν ουσαν, απο της προς τες αϛαχυας ομοιο- "τητος, κατα την μορφην. To theſe may be added the teſtimony of "the moderns; Murray, Apparat. Medic. vol. 5. pp. 445, 446. "Lewis, Mat. Med. and the following note from Bodæus, which "perhaps beſt ſolves the queſtion: In Indica Nardo, ſalvo meliore "judicio, ſpica dicitur cauliculus, multis capillaceis foliolis obſitus, "ad inſtar ariſtarum; nec de nihilo aut immerito Græci antiquiſ- "ſimi, Romani et Arabes Nardo illi Spicæ appellationem impoſu-

" erunt. Radix quidem eſt, ſed quæ cauliculum e terra emittat, " aliquando plures ex una radice capillaceis denſis ariſtatiſque foliolis " veſtitos. Not. in Theophraſt. p. 1018." F. F. Add to this the teſtimony of Dr. Roxburgh, and it will appear evidently that Pliny was miſtaken. Another medical friend informs me, " that the " matted fibres, which are the part choſen for medicinal purpoſes, " are ſuppoſed by ſome to be the *head*, or ſpike of the plant, by " others, the *root*—they ſeem rather to be the remains of the wi- " thered ſtalks, or ribs of the leaves; ſometimes entire leaves and " pieces of ſtalks are found among them." Is not this the origin of Pliny's miſtake, which Dr. Roxburgh ſets at reſt? and may not theſe leaves and ſtalks be purpoſely left to increaſe the weight and price; or even to deceive, as the natives are ſo jealous of their plant? All this accords with the quotation of Dr. F. from Bodæus.

But there is ſtill a more remarkable particular in Pliny, which is, that he evidently copies the Periplûs in the three places which he allots for the markets of the ſpikenard; for he mentions Patala at the head of the Delta [n] of the Indus, correſpondent to the Barbarika of the Periplûs; and another ſort which he calls Ozænítides, evidently agreeing with the mart of Ozéne (p. 27. Peripl.); and a third ſort named Gangitic, from the Ganges, anſwering to gapanic, for which all the commentators agree in reading Gangitic. Very ſtrong proofs theſe, that Pliny had ſeen this journal and copied from it; as he mentions nothing of Ozéne in his account of the voyage, and only catches Ozænítides here incidentally. See Salmaſius, p. 1059. et ſeq. who is very copious on the ſubject, and has exhauſted all that the ancients knew of this aromatic [o].

[n] Whether this in Pliny does not apply to coſtus?

[o] It reſembles the tail of a ſmall animal, in Dr. Burgeſs's Collection.

70. Ναύπλιος,

70. Ναύπλιος, p. 27. *Nauplius.* P.

It ſeems to be an inferior tortoiſe-ſhell from the context, which runs thus, ϗ χελώνη διάφορος μετὰ τὴν Ἰνδικὴν ϗ ναύπλιος ὀλίγος, *i. e.* tortoiſe-ſhell of ſuperior kind, but not equal to the Indian; and a ſmall quantity of that ſpecies called nauplius. It may, however, be a different commodity; but I cannot trace it in Pliny, unleſs it be the ſhell of that fiſh he calls nauplius, lib. ix. c. 30. or 49 Hard. which ſeems a ſpecies of the nautilus; but which Hardouin ſays, does not fail in its own ſhell, but a borrowed one.

71. Νῆμα Σηρικὸν. D. P.

Sewing ſilk, or ſilk thread, from China. If this paſſage be correct, it proves that ſilk was brought into India from China, as early as the age of the Periplûs. Νῆμα can hardly be applied to a web, it ſeems always to be thread.

It is called μέταξα by Procopius and all the later writers, as well as by the Digeſt, and was known without either name to Pliny; for he ſays, the women who wrought it had the double trouble of untwiſting the ſilk thread, and then weaving it up into a manufacture. Unde geminus noſtris fœminis labor redordiendi ſila rurſumque texendi. See Procop. Anecd. p. 3. Zonaras ad Concil. p. 231. And for the hiſtory of the ſilk trade at Tyre, ſee Procop. Hiſt. Arc. p. 73. Juſtinian ruined the trade at Tyre, and yet ſent the Monks to bring the worm from the Eaſt. Procop. de Bello Goth. iv. 17. p. 613. Byz. Hiſt. See Gibbon.

Αυτη δε εστιν η μεταξα εξης ειωθασι την εσθητα εργαζεσθαι, ην παλαι Ελληνες Μηδικην εκαλων, τανυν δε Σηρικην ονομαζουσιν. Procop. Perſic. & Vandal. lib. iv. Μεταξα ſera cruda. Du Cange. F. Unwrought ſilk is called Ἔριον in the Periplûs.

Ιματία

Ιματία τὰ ἐκ ΜΕΤΑΞΗΣ ἐν Βηρυτῷ μὲν καὶ Τύρῳ πόλεσιν τῆς Φοινίκης ἐργάζεσθαι ἐκ παλαιᾶ ἐιώθει· οἱ δὲ τυτῶν ἐμποροὶ καὶ δημιυργοὶ καὶ τεχνῖται ἐνταῦθα τὸ ἀνέκαθεν ὦκυν. Procop. Anec. p. iii. Hiſt. Arc. p. 8.

The manufactures had been long eſtabliſhed at Berýtus and Tyre. The web was formed from the metaxa; may we not call it organzined ſilk? The price of the metaxa was raiſed by the taxes impoſed in Perſia; and, upon the manufacturers raiſing the price, Juſtinian fixed a maximum and ruined the trade.

O

72. Ὀθόνιον. *Muſlin.* P.

1ſt ſort. Ἰνδικὸν τὸ πλατύτερον ἡ λεγομένη Μοναχὴ.

Wide India muſlins called Monakhè, that is, of the very beſt and fineſt ſort; *particularly* fine.

2d ſort. Σαγματογήνη.

Which is evidently the cotton too ordinary to ſpin, and made uſe of only for ſtuffing of cuſhions, beds, &c. The Greek term is derived from Σάσσω, to ſtuff, Σάγματα, ſtuffing, or things ſtuffed. The article in the Periplûs would be better read Σαγματογένη, the *ſort* of cotton uſed for ſtuffing. Marco Polo, lib. iii. c. 29. ſays, Il Bambagio che ſi cava di quello, coſi vecchi non e buon de filare, ma ſolamente per coltre. And Strabo; ἐκ τύτυ δὲ [the cotton plant] Νέαρχος φησὶ, τὰς ἐυητρίυς σινδόνας ὑφαίνεσθαι, τὺς δὲ Μακεδόνας ἀντὶ κναφάλων αὐτοῖς χρῆσθαι, καὶ τῆς Σαγματοσάγης. Fine muſlins are made of cotton; but the Macedonians uſed cotton for flocks, and ſtuffing of couches. Mr. Marſden, p. 126. notices the cotton uſed only for this purpoſe in Sumatra as the Bombax Ceiba; and Percival mentions the ſame

in Ceylon, p. 328. See alſo Dampier, New Holland, p. 65. and Voyage, p. 165. Ὀθόνιον is from ὀθόνη, the thin inner garment of women, in contra-diſtinction to the χιτὼν of men. Hom. Il. Σ. 595. Meurſius propoſes Σαγματογουνη, veſtis pellicia. F.

Monakhè, ſingle.

3d ſort. Χυδαῖον. P.

Coarſe muſlins, or rather coarſe cottons, called at preſent dungarees; Wilford, Aſ. Diſſert. vol. ii. p. 233. to which monakhè is oppoſed as a finer ſort.

73. Οἶνος. *Wine.* P.

1. Λαοδικηνὸς. *Wine of Laodicea*, in Syria. Syria is ſtill famous for its wine. Volney, tom. ii. p. 69. Strabo. d'Anville Geog. An. ii. 134.

2. Ιταλικὸς. *Italian Wine.* P.

3. Αραβικὸς. *Arabian Wine.* P. It is dubious whether it may not be palm or toddy wine, it ſeems to have been a great article of commerce.

74. Ὄμφαξ Διοσπολιτικὴ. *Dipſe, Rob of Grapes from Dioſpolis.* P.

For the explanation of this article I am wholly indebted to Dr. Falconer, and return my thanks to him more particularly, as it was the commencement of his correſpondence. He obſerved to me, that it was the dipſe of the Orientals, and ſtill uſed as a reliſh all over

over the Eaſt. Dipſe is the rob of grapes in their unripe ſtate, and a pleaſant acid. I have found many authorities to confirm his ſuggeſtion. Pliny, v. 6. xii. 19. xii. 27. xiv. 9. xxiii. called by Columella, Sapa vini. See alſo Shaw. Dr. Ruſſel's Aleppo, p. 58, and Pocock, i. p. 58. made at Faiume, and called Beemas, or Pacmas. Iter Hieroſol. ex uvarum acinis Mauris Zibib vel Zibiben dictum, p. 357, ex acinis ſuccum exprimunt, coquuntque, donec ad ſpiſſitudinem, inſtar mellis ebullierit, Pacmas id Arabicè vocant, nos defrutum, Itali moſto cotto, muſtum coctum, eoſque in cibis pro intinctu utuntur, nonnulli aquâ multâ dilutum bibunt, id. p. 387. Ebn Haukal likewiſe deſcribes it, and calls it Douſhab, made at Arghan in Suſiana.

75. *Onyx Arabicus.* D. *Arabian Onyx.*

This article ſtands in the Digeſt ſo unconnected with all that precedes and follows it, that Ramuſio, in order to make it a drug, reads it Gum Arabic; and I can hardly think otherwiſe than that it is a corruption, and that ſome aromatic produce of Arabia is meant; but what, it is impoſſible to determine. Mr. Falconer is perſuaded "that it is the Onyx uſed as a box to contain odours or perfumes, "the ſame as the Alabaſter of Scripture, Luke, vii. 37. and Pliny, "lib. xxxvi. c. 8. or 12 Hardouin, ſtrongly confirms this opinion, "for there the Onyx is ſaid to be found in Arabia, and to be the "ſame as Alabaſtrites, and to be excavated for the purpoſe of con-"taining unguents or perfumes; and ſo Horace Nardi parvus onyx "eliciet cadum." F. I have nothing to object to this but the context.

76. Ὀπήτια,

76. Ὀπήτια, p. 27. *Awls or bodkins.* P.

An article in trade on the coaſt of Africa, as needles are at this day.

77. Ὀρείχαλκος. *Mountain Braſs.*

Uſed for Ornaments. Ramuſio calls it white copper, copper from which the gold and ſilver has not been well ſeparated in extracting it from the ore.

II

78. { *Pardi* / *Leopardi* / *Pantheræ* } D. *Tygers, Leopards, Panthers.*

{ *Leones* / *Leænæ* } D. *Lions* and *Lioneſſes.*

79. Παρθένοι ἐυειδεῖς. P.

Handſome women ſlaves for the haram are mentioned as intended for preſents to be ſent up to the king of Guzerat, whoſe capital was Ozénè or Ougein.

80. *Pelles Babylonicæ.* D.
Parthicæ.

Hydes from Babylonia or Parthia, poſſibly dyed like Turkey or Mórocco leather; but Q.?

81. Πελύκια. P.

Small hatchets or axes for the African trade.

82 *Pentaſphærum. Folium Pentaſphærum.* D. Nard.

See article Nard. Mr. Falconer thinks that Pliny has not confounded the Folium, or leaf of the Nard with the Betel as Salmaſius aſſerts; but that he takes the leaves from three different parts of the plant, the large making the leaſt valuable odour, and the leaſt leaves the beſt; hence, the diſtinction of hadroſphærum, meſoſphærum, microſphærum, and that the pentaſphærum of the Digeſt is ſtill an inferior ſort. Of this I am no competent judge, but I think it ſtrange that the diſtinctions of Hadroſphærum, &c. ſhould be applied by the ancients both to the Betel, as they are by the Periplûs, and to the Spikenard as they are by Pliny, if this opinion be founded. Pliny, lib. xxiii. 4. has certainly copied the ſame authorities as Dioſcorides, for he makes malobathrum a maſticatory to ſweeten the breath, and an odour to put among cloaths, as we ſometimes put lavender; both which particulars are in Dioſcorides, but lib. xii. 59. Hard it is a *tree* found in Syria and Egypt as well as India. It is much more probable that Mr. Falconer ſhould be right, than one who is little acquainted with Natural Hiſtory, but my doubts concerning Pliny's confuſion are not removed.

83. Πέπερι. *Pepper.* D. P.

Imported from the coaſt of Malabar, as it ſtill is; the native term on the coaſt is pimpilim; Salm. p. 1070. or the Sanſkreet, pipali. Aſ. Reſ. vol. iv. p. 234. The pepper coaſt is called in Arabic beled-el-fulful. D'Anville, Ind. p. 118.

It was found by the Greeks from Egypt, firſt in Ethiopia, as an article of commerce brought thither by the Arabs, but was known in Greece much earlier.

Two ſorts are diſtinguiſhed in the Periplus, " and recognized by " Theophraſtus, lib. ix. c. xxii. στρογγυλον round, and ἀπομηκες long. " And by Dioſcorides, the Betel is likewiſe a ſpecies of the pepper. " Porro Betle foliis Piperis adeo ſimilia ſunt, ut alterum ab altero " vix diſcerni queat, niſi quod Piperis folia paulo duriora ſunt, et " nervi excurrentes paulo majores. Bodæus a Stapel in Theo- " phraſtum." F. F.

1. Κοττοναρικὸν. P.

From Cottonara, the kingdom of Canara, according to Rennell, which is ſtill the principal mart for pepper, or at leaſt was ſo before the Engliſh ſettled in Sumatra. This is the black pepper. See Marſden's Sumatra, p. 117. White pepper is the black ſtripped of its outward coat.

2. Μακρὸν. P.

Long pepper[60], ſo called from its form being cylindrical, an inch and an half long. It conſiſts of an aſſemblage of grains or ſeeds joined cloſe together. It reſembles the black pepper, but is more pungent, and it is a ſpecies of the Eaſt India pepper, totally diſtinct from the Cayenne, and uſed for the purpoſe of adulteration. This is the reaſon that we buy pepper ground cheaper than whole.

84. Περιζώματα. P.

Girdles or ſaſhes, and perhaps diſtinguiſhed from the following article,

(85. Πηχυιαῖαι αἱ ζῶναι. P.

Saſhes of an ell long,) only in the difference of make or ornament.

[60] Tabaxir is the common long pepper.

86. Πιννικὸν. D. P.

Pearls, or the pearl oyſter. See the fiſhery at Cape Comorin.

87. Πορφύρα διαφόρα καὶ χυδάια, p. 35. P.

Purple cloth of two ſorts, fine and ordinary. An article of trade at Mooſa in Arabia.

88. Ποτήρια, *Drinking Veſſels.* P.
Χαλκᾶ, *Braſs.* P.
Στρογγύλα, *Round.* P.
Μεγάλα, *Large.* P.

Probably all three epithets apply to the ſame veſſel. An article of import on the coaſt of Africa.

89. Πυρὸς ὀλίγος. P.

Wheat in ſmall quantities, imported into Omana, or Oman in Arabia.

P

90. Ῥινόκερως. *Rhinoceros.* P.

The horn or the teeth, and poſſibly the ſkin, imported from the coaſt of Abyſſinia, where Bruce found the hunting of this animal ſtill a trade, which he has deſcribed in all of its branches, vol. iv.

91. Σάγγαρα.

Σ

91. *Σάγγαρα.* P.

Boats or ſmall veſſels uſed on the coaſt of Cochin for conveying the native commodities from the interior to the ports, and ſometimes along the coaſt from Malabar to Coromandel and the contrary.

92. *Σάγοι Αρσινοητικῶι γεγναμμένοι καὶ βεβαμμένοι*, p. 14. P.

Rugs or cloaks made at Arſinoe (Suez), dyed, and with a full knap.

93. *Σανδαράκη.* P.

Red pigment, Salm. p. 1155. found in gold and ſilver mines. Pliny. Ore of Cinnabar. Dr. Burgeſs. Sandaracham et Ochram Juba tradit in inſula rubri maris Topazo naſci, inde nunc pervehuntur ad nos. Plin. xxxv. 22. Hard.

94. *Σακχαρι.* D. P. *Sugar,*

Made at Tyre in the 12th century. Benjamin of Tudela. Bergeron, p. 17. But when firſt planted in Europe, dubious. See article 60.

95. *Σάπφειρος. Sapphire Stone.* D. P.

The ancients diſtinguiſhed two ſorts of dark blue or purple, one of which was ſpotted [61] with gold. Pliny ſays, it is never pellucid, which ſeems to make it a different ſtone from what is now called

[61] Dr. Burgeſs has ſpecimens of both ſorts, the one with gold ſpots like lapis lazuli, and not tranſparent.

ſapphire.

ſapphire. Dutens ſays, the true azure ſapphire was conſecrated to Jupiter by the ancients.

96. *Sarcogalla*, or *Sarco-colla*. D.

A ſyptic, from Σὰρξ and κολλάω, *to unite the fleſh*, that is, to draw the lips of the wound together, and heal it. Suppoſed to be gum Arabic by ſome; but others ſay, from a tree in Perſis. Ramuſio reads the text without any notice of al chelucia or ſarcogalla, and concludes all three under the following article, which is read onyx Arabicus, but which he reads gum Arabic, meaning, perhaps, to render the three conſiſtent; and a drug ſeems more requiſite than the onyx-ſtone; but ſee Onyx Arab. Dr. Falconer ſays, the ſarcocolla is not gum Arabic; but adds, that it is well known in the ſhops, though the tree, or country which produces it, is not known. See Chambers in voce. " Fit et ex ſarcocolla, ita arbor vocatur, " gummi utiliſſimum pictoribus et medicis. Plin. lib. xiii. 11." F.

97. *Sardonyx*. D.

" The ſardonyx is next in rank to the emerald: Intelligebantur " colore in Sarda, hoc eſt velut carnibus ungue hominis impoſito, " et utroque tranſlucido, taleſque eſſe Indicas tradunt. Arabicæ ex- " cellunt candore circuli prælucido atque non gracili, neque in " receſſu gemmæ aut in dejectu renitente, ſed in ipſis umbonibus; " nitente præterea ſubſtrato nigerrimi coloris. Plin. xxxvii. 7." F. See Chambers in voce, where, it is ſaid, the ſardonyx of Pliny is not what now bears the name but a camæa. I have not found this paſſage as cited in Pliny, but conclude I have the numerals wrong: the ſardonyx is mentioned in the chapter adduced.

98. Σηρικὰ

98 Σηρικὰ δέρματα. *Chineſe Hides or Furs.* P.

What is meant by δέρματα no where appears, unleſs it can be applied to the τάρποναι, whence the malobathrum was procured. But this is very dubious. See Μαλόβαθρον. Pliny mentions the Sêres ſending their iron wrapt up in or mixed veſtibus pellibuſque. F. See article following.

99. Σίδηρος. *Iron.* P.

An import into Abyſſinia for the manufacture of ſpear heads, to hunt the elephant, rhinoceros, &c.[62]

Ἰνδικὸς. D. P. *Ferrum Indicum.* D.

Iron tempered in India.

" Ex omnibus generibus palma Serico ferro eſt. Seres hoc cum " veſtibus ſuis pellibuſque mittunt. Secunda Parthico, neque alia " genera ferri ex mera acie temperantur, cæteris enim admiſcetur. " Plin. lib. xxxix. c. 14. Plutarch (in Craſſo). And Arrian de Rebus " Parth. or the work aſcribed to him, mentions that the Parthians " covered their armour with leather, but at the moment of attack " they threw off the covering, and appeared glittering in their bur- " niſhed ſteel. Milton alſo, Par. Regained, lib. iii." F. In montibus Kabel (Cabul) inveniuntur ferri fodinæ celeberrimæ, et humanis uſibus aptiſſimæ, producunt enim ferrum acutum et venuſtum. Al Edriſſi.

100. Σινδόνες. D. P.

Fine linen of any ſort, but that imported into Abyſſinia might be Egyptian, and poſſibly of cotton; but

[62] To cut like an Indian ſword, is a common Arabic proverb in Arabſha. And in Egypt, Shaw (p. 364.) ſays, the hardeſt tools (as drills for working the granite obeliſks) were made of Indian iron. Shaw quotes the Periplûs, but not perhaps juſtly.

Σινδόνες

Σινδόνες αἱ διαφοραὶ Γαγγιτικαὶ, P.
Can be nothing elſe but the fineſt Bengal muſlins.

101. Σῖτος. *Wheat Corn.* P.

102. Σκέπαρνα. *Adzes.* P.
In contradiſtinction to πελύκια, hatchets.

103. Σκεύη αργυρᾶ. *Silver Plate.* P.

104. Ὑαλὰ. P.
Veſſels of chryſtal, or glaſs in imitation of chryſtal.

105. *Smaragdus.* D. The Emerald.
There are twelve ſorts, according to Pliny and Iſidorus. (Gothofred.) Nero uſed an emerald as an eye-glaſs; and Gothofred, or Iſidorus, ſuppoſes that the emerald has a magnifying power. Mr. Falconer imagines it to magnify only from the denſity of the medium. Mr. Dutens denies that the ancients had any knowledge of the emerald, and in this he is ſupported by Tavernier, the Abbè Raynal, Harris, and Bruce. The green gems which the ancients called emeralds, were all of inferior quality to thoſe brought from Braſil and Peru; and from the ſize mentioned of ſome of them, they are juſtly ſuppoſed to be Fluors: but we read of an emerald iſland in the Red Sea, and much notice is taken of them, both by naturaliſts and poets. The greateſt difficulty to be ſurmounted by Mr. Dutens ſeems to be the archbiſhop of York's emerald, engraved with a Meduſa's head of Grecian ſculpture, and brought from Benares; but this, he calls a green ruby, p. 14. See Bruce, i. 206. who ſays, Theophraſtus mentions an emerald of four cubits, and a pyramid

ſixty

ſixty feet high, compoſed of four emeralds. And Roderick of Toledo talks of an emerald table in Spain 547 feet long! But Bruce ſays, likewiſe, the true emerald is as hard as the ruby. How then are we to diſtinguiſh between an emerald and a green ruby? Bruce viſited the Emerald Iſland in the Red Sea, and found nothing more like emeralds than a green chryſtalline ſubſtance, little harder than glaſs; and this, he adds, is found equally on the continent and the iſland. Emeralds have been found in Peru, in the barrows of the dead, of a cylindrical form; ſo that the Peruvians, anciently, muſt not only have known the gem, but valued it; and muſt alſo have poſſeſſed the art of cutting it. Ulloa. Mr. Falconer has ſuggeſted to me a ſingular paſſage in Pliny, which may be applied to Nero's emerald, and which had eſcaped my notice: Iidem plerumque et concavi ut viſum colligant. Plin. lib. xxxvii. c. 5. or 16 Hard.; ſo that the emerald mentioned in this inſtance might truly be conſidered as an eye-glaſs for a ſhort ſight. F. The whole chapter is ſo very expreſs, that it is hard to conceive what is an emerald, if Pliny's is not: Scythicorum Ægyptiorumque tanta eſt duritia ut vulnerari nequeant. This ſeems to expreſs that hardneſs which the jewellers try by the file.

106. Σμύρνα. *Myrrh.* D. P.

" The myrrh of the moderns is the ſame as that deſcribed by the " ancients, but the tree from which it is obtained is ſtill doubtful. " It is likewiſe ſtill brought from the ſame countries, that is, Arabia, " and the weſtern coaſt of the Red Sea. But the Trogloditic, or " Abyſſinian, is preferred to that of Arabia. Murray, Apparat. " Med. vol. vi. p. 213. See Bruce, vol. v. p. 27. Omnium prima eſt " quæ Troglodytica appellatur, accepto cognomine a loco in qua

" provenit, ſplendens, ſubviridis ac mordens. Dioſcorid. Matthioli, " lib. i. c. 67. Plin. lib. xii. c. 15. It was procurable in Arabia, " imported from the oppoſite coaſt of the Red Sea." F. F.

Διαφέρουσα τῆς ἄλλης. P.

Of a ſuperior ſort.

Ἐκλεκτὴ. P.

Of the beſt ſort.

107. *Spadones.* D. *Eunuchs.*

108. Στακτὴ. *Gum.* D. P.

Αξειρμινάια, read Σμυρνάια, by Bochart, Geog. Sac. ii. 22. Salm. 520. Extract or diſtillation from myrrh, of the fineſt ſort. The reading is proved by Salmaſius from a ſimilar error in an inedited epigram. Minêan; Σμύρνης Αμμιννέας, Dioſcor. lib. i. c. 78. Plinius habet Minæa, lib. xii. c. 16. and Heſych. Ἀμινᾶιον οἶνον. Stephan. in voce. F.

109. Στῆμι. Στίμμι. P.

Stibium for tinging the eyelids black.

110. Στολαὶ Ἀρσινοητικαὶ. P.

Women's robes manufactured at Arsínoè or Suez.

111. Στύραξ. *Storax.* P.

One of the moſt agreeable of the odoriferous reſins. There are two ſorts, ſtorax in the tear, ſuppoſed to anſwer to the ancient ſtyrax calamita,

calamita, from its being brought in a hollow reed, or its diſtillation from it; and common ſtorax, anſwering to the ſtacte ſtyrax[63] of the ancients. It now grows in the neighbourhood of Rome; but the drug was anciently brought thither from the iſlands in the Archipelago. See Salm. p. 1026. Chambers in voce. Moſt of theſe gums, reſins, and balſams have in modern practice yielded to the American, as this ſeems to have given way to the balſam of Tolu.

112. Σῶματα, p. 15. P.

Slaves from Africa, an ancient trade! but the number was not great.

Υ

113. Ὑάκινθος. D. P.

The hyacinth or jacinth, a gem which Salmaſius ſays is the ruby, p. 1107. See Solinus, c. xxx. p. 57. where it ſeems to be the amethyſt. And Mr. Falconer concludes, that it is an amethyſt, from the expreſſion of Pliny, emicans in amethyſto fulgor, violaceus dilutus eſt in Hyacintho; but Hardouin reads, emicans in amethyſto fulgor violaceus, dilutus eſt, &c., and violaceus fulgor is ſurely the peculiar property of the amethyſt. Salmaſius adds, that the Oriental name of the Ruby is Yacut from Hyacinthus; but Dutens ſays the hyacinth is orange Aurora, inclining to poppy, p. 35. and makes the Jacinth a diſtinct gem from the Ruby; but the Ruby, he obſerves,

[63] Strabo mentions ſtyrax in Piſidia; a diſtillation from a tree, cauſed by a worm breeding in it. Lib. xii. p. 570.

likewiſe, is of a poppy colour, and is called Hyacinth when it has the leaſt tincture of yellow. Whether this diſtinction applies to the ancients, I am not a judge to determine; but if the hyacinth is a diſtinct ſpecies, I can find no claſſical name for the ruby. See Pliny, xxxvii. 9. or 41. Hard. and fulgor violaceus ſeems appropriate to the amethyſt.

Φ

114. *Fucus.* D. *Red Paint.*

X

115. Χαλκὸς. *Braſs or Copper.* P.

116. Χαλκεργήματα. P.

Veſſels of braſs, or any ſort of brazier's work.

117. *Al-chelucia*, which Ramuſio reads *Agallochum*, *Aloes.* D.

Matthioli coincides with Ramuſio in the correction. Dioſcor. p. 40. "Agallochum is the aloes wood, xylo aloes, lignum aloes, "the lign aloes of ſcripture. Numb. xxiv. 6. and not aloes the "drug. The beſt is heavy, compact, gloſſy, of a cheſnut colour, in-"termixed with a blackiſh and ſometimes purple ſhade. It is reſi-"nous and balſamic. Neuman's Chemiſtry, by Lewis." F. F. I was myſelf diſpoſed to think Chelucia, χελυκία, a corruption of Χελυς, Chelys, the tortoiſe, *i. e.* tortoiſe-ſhell.

118. Χελώνη.

118. Χελώνη. D. P.

Tortoiſe-ſhell ſeems to have formed a great article of commerce, for ornaments of furniture, as beds, tables, doors, &c. both in Italy, Greece, and Egypt. It was brought from the coaſts of Africa near Moondus, from Socotra, Gadroſia, Malabar, and the Lackdive, and Maldive Iſlands, and from Malacca. The latter ſeems to be deſigned by the χρυσιονῆσοι of the Periplûs.

119. Χιτῶνες. P.

Under garments, imported from Egypt into Africa.

120. Χρῆμα. *Specie.* P.

The Periplûs is very accurate in noting the ports where it was neceſſary to trade with ſpecie; and in more inſtances than one, notes the advantage of exchange.

121. Χρυσόλιθος. *Chryſolite.* P.

Sometimes the ſame as chryſites, the touchſtone for gold, Salm. p. 1103; but deſcribed as a ſtone as it were ſprinkled with ſpots of gold, Salmaſius, p. 407. who points out what it is not, but cannot determine what it is. It may well be the topaz[64], as Dutens makes it, p. 18.

122. Χρυσῦν. P.

Uſed with δηνάριον, as is αργυρῦν alſo, expreſſing gold and ſilver denarii.

123. Χρυσώματα. *Gold Plate.* P.

[64] The Bohemian is yellow, with a greeniſh nut; the Oriental is very pale yellow. Dr. Burgeſs's Oriental topaz, deep yellow.

There is a corrupt paſſage in the Digeſt, which appears thus: Chelynie hopia Indica adſerta.

Gothofred joins it to the preceding article Beryllus; and Ramuſio reads it Beryllus Cylindrus. Salmaſius ſuppoſes it to be a ſeparate article, and reads it Chelone Æthiopa, as one ſpecies of the Chelonia of Pliny, (xxxvii. 56. Hard.) that is, the gem called the Æthiopian Tortoiſe Eye, and Chelone Indica, another ſpecies; and it may be added, that this is conformable to the order of the Digeſt, when it mentions two ſpecies of the ſame article. The paſſage, however, is much doubted, and is ſometimes joined with adſerta, and ſometimes ſeparated. Hopia Indica adſerta, opera Indica adſerta, omnia Indica adſerta, and again opera Indica, tincta, adtincta, &c. &c.; but if we accede to Salmaſius in regard to the two ſpecies of Chelone, and place the period at Indica; adſerta may be another general title like ſeveral in the Digeſt, and eaſily converted into Serica, it would then ſtand thus:

Serica,	- -	general title,	ſilk.
Metaxa	- -	1ſt ſpecies, -	ſilk thread.
Veſtis Serica	-	2d ſpecies, -	ſilk web.
Nema Sericum,	-	3d ſpecies, -	ſewing ſilk.

The only objection to this is, that Metaxa and Nema Sericum are uſually applied to the ſame thing. Mr. Falconer ſuppoſes that tincta, if the reading can be ſupported, may mean dyed or coloured ſilks. F.

Camphor.

Camphor. *Cafur*, *al Kafur*, of the Orientals. I had expected to find this article in the Digeſt, but as it comes particularly from Java, Sumatra, and Borneo, this may account for its being unnoticed. The hiſtory of it occurs in Schikard's Tarik, p. 185. who commends Marco Polo for his veracity, (was he not the firſt who brought the knowledge of it to Europe?) and he adds, that Al Edriſſi ſpeaks of Lanchialos, and then Kalan, where Camphor is obtained, and Kalan he ſuppoſes to be Borneo. This is a proof that the drug was known to the Arabians in the twelfth century; but the Lanchialos of Al Edriſſi is very dubious; he certainly makes it a different iſland from Ceylon, and yet Lanca Ilam is one of the Hindoo names of Ceylon. See Al Edriſſ. p. 35.

Capilli Indici. D.

THE END.

ERRATA.

Page 257. note 75. line 5. *for* Appendix, No. I. *read* Appendix, No. III.
371. line 3. *for* Ὕτελος ὠρχὴ, *read* Ὕτελος ἀρχὴ
372. — 10. *insert a* full ſtop *after* place, *and a* comma *after* Pliny.
380. note 114 line 8. *for* ſerivere, *read* ſerivere.
480. the running title of *Sequel to the Periplûs of the Erythréan Sea*, ſhould have concluded with p. 481.
494. line 7. *dele the* comma *at* Maes, *and place it at* Ptolemy.
534. line 13. *for* בַּתְּאַשְׁרִים, *read* בַּתְּאַשְׁרִים
552. — penult. *dele* by any one.
Appendix, p. 45. note 51. line 3. *for* Plantagin, *read* Plantagini.

CORRECTIONS.

Page 16. Part I. note 20. Why does Weſſeling tell me to believe this? This ought not to have been imputed to Weſſeling, but to Stevens in Weſſeling's edition of Cteſias.
18. Part I. line 8. The poſition of Palibothra, fixed by Sir W. Jones, is again rendered dubious by Lieut. Wilford. Aſiatic Reſearches, vol. v. p. 272. Lond. ed.
27. Part I. note 48. Plutarch does not ſay what is imputed to him, but the contrary: it never has happened, and never will, *except in that country*. This error is acknowledged with ſome degree of mortification.
74. Part I. note 14. Beled ſignifies a *country*, not a *caſtle*.

ADDITIONS.

Page 275. Part II. The Negra of Cedrenus is Najeran.
323. Part II. Sanuto's Map is noticed by d'Anville, Antiq. de l'Inde, Supplement, p. 187. but not its claim to antiquity.

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